



# MMWR



# **Morbidity and Mortality Weekly Report**

Weekly

December 22, 2006 / Vol. 55 / No. 50

# Pedal-Cycle Injuries Among Children Aged <6 Years — Wisconsin, 2002–2004

Measures to improve pedal-cycle\* safety and increase helmet use often target school-age children rather than younger children (1), even though preschool children wearing helmets have fewer injuries (2) and are more likely to wear helmets in the future (3), compared with children who do not wear helmets. Children aged <6 years also use pedal cycles; whether they are passengers on a parent's bicycle, riding a tricycle or pedal car, or learning to ride a bicycle, these young cyclists often sustain injuries (1). To provide guidance for intervention strategies targeted to young children in Wisconsin, CDC and the Wisconsin Division of Public Health analyzed data collected from January 1, 2002 through December 31, 2004, from all nonfederal emergency departments (EDs) and hospitals in Wisconsin regarding pedal-cycle injuries among children aged <6 years. This report describes the results of that analysis, which indicated that, during 2002-2004, a total of 2,046 ED visits by Wisconsin residents aged <6 years for pedal-cycle injuries occurred; for 1,305 (63.8%) of these visits, the primary diagnosis was a head or neck injury. These findings underscore the need for interventions designed to reduce head and neck injuries in the youngest users of pedal cycles.

The Wisconsin Bureau of Health Information and Policy maintains data from ED visits and hospital discharges through a statewide mandatory reporting system for nonfederal hospitals. An injury event was defined as a 2002–2004 ED visit or hospitalization for a Wisconsin resident aged <6 years with an International Classification of Diseases, Ninth Revision, Clinical Modification code from 800 to 959 indicating injury as one of the diagnoses for the encounter and an E-code indicating an injury sustained by a rider or passenger on a pedal

cycle<sup>†</sup> (4). In addition, the Wisconsin Vital Records Office collects mortality information for the state; pedal-cycle deaths were defined as reports with International Classification of Diseases and Related Health Problems, Tenth Revision codes V10-V19 as the underlying or contributing cause of death. U.S. Census Bureau population estimates from 2002 were used to calculate incidence rates (5). The Barell Injury Diagnosis Matrix was used to classify the primary diagnosis by body location and nature of the injury (6). Secondary diagnoses were excluded for the purpose of this analysis. For comparison, the number and proportion of ED visits for head and neck injuries for Wisconsin children aged 6-18 years were calculated using the same methodology. In addition, for two areas, Port Washington (population: 10,518) and Milwaukee County (population: 934,352), the number of pedal-cyclerelated ED visits and the proportion of head and neck injuries in residents aged <6 years were examined separately to determine whether a mandatory helmet law in Port

#### INSIDE

- 1348 Measles United States, 2005
- 1351 Use of Cessation Methods Among Smokers Aged 16–24 Years — United States, 2003
- 1354 Director's Perspective James O. Mason, M.D., Dr.P.H., 1983–1989
- 1359 Update: Influenza Activity United States, October 1–December 9, 2006
- 1363 QuickStats

<sup>&</sup>lt;sup>†</sup> E800.3, E801.3, E802.3, E803.3, E804.3, E805.3, E806.3, E807.3, E810.6, E811.6, E812.6, E813.6, E814.6, E815.6, E816.6, E817.6, E818.6, E819.6, E820.6, E821.6, E822.6, E823.6, E824.6, E825.6, E826.1, E827.1, E828.1, and E829.1.

Any wheeled, pedal-powered vehicle, including tricycles, bicycles, pedal cars, and trailers or sidecars attached to these vehicles.

The MMWR series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested Citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2006;55:[inclusive page numbers].

#### **Centers for Disease Control and Prevention**

Julie L. Gerberding, MD, MPH Director

Tanja Popovic, MD, PhD

(Acting) Chief Science Officer James W. Stephens, PhD

(Acting) Associate Director for Science

Steven L. Solomon, MD

Director, Coordinating Center for Health Information and Service

Jay M. Bernhardt, PhD, MPH

Director, National Center for Health Marketing

Judith R. Aguilar

(Acting) Director, Division of Health Information Dissemination (Proposed)

#### **Editorial and Production Staff**

John S. Moran, MD, MPH (Acting) Editor, MMWR Series

Anne Schuchat, MD

Guest Editor, Director's Perspective Series

Suzanne M. Hewitt, MPA

Managing Editor, MMWR Series

Douglas W. Weatherwax (Acting) Lead Technical Writer-Editor

Catherine H. Bricker, MS

Jude C. Rutledge Writers-Editors

Beverly J. Holland

Lead Visual Information Specialist

Lynda G. Cupell

Malbea A. LaPete

Visual Information Specialists

Quang M. Doan, MBA

Erica R. Shaver

Information Technology Specialists

#### **Editorial Board**

William L. Roper, MD, MPH, Chapel Hill, NC, Chairman Virginia A. Caine, MD, Indianapolis, IN David W. Fleming, MD, Seartle, WA

William E. Halperin, MD, DrPH, MPH, Newark, NI

Margaret A. Hamburg, MD, Washington, DC

King K. Holmes, MD, PhD, Seattle, WA

Deborah Holtzman, PhD, Atlanta, GA

John K. Iglehart, Bethesda, MD

Dennis G. Maki, MD, Madison, WI

Sue Mallonee, MPH, Oklahoma City, OK

Stanley A. Plotkin, MD, Doylestown, PA

Patricia Quinlisk, MD, MPH, Des Moines, IA

Patrick L. Remington, MD, MPH, Madison, WI

Barbara K. Rimer, DrPH, Chapel Hill, NC

John V. Rullan, MD, MPH, San Juan, PR

Anne Schuchat, MD, Atlanta, GA Dixie E. Snider, MD, MPH, Atlanta, GA

John W. Ward, MD, Atlanta, GA

Washington and the urban environment of Milwaukee County influenced the number and types of pedal-cycle injuries (7,8). These areas were included in the state totals.

During 2002-2004, a total of 546,950 ED visits associated with a child aged <6 years occurred; 116,395 of these visits listed an injury as the primary diagnosis. Of these injury visits, 2,046 (1.8%) were attributed to injuries resulting from a pedal-cycle crash, accounting for an annual incidence rate of 16.7 per 10,000 population aged <6 years. Of these pedalcycle injury visits, 1,305 (63.8%) were for a primary diagnosis of head or neck injury, and 74 (3.6%) were for a primary diagnosis of traumatic brain injury. In comparison, 682,257 visits to an ED associated with Wisconsin residents aged 6-18 years occurred; 284,127 (41.6%) were for injuries. For this older population, 13,872 (4.9%) injury visits were for pedal-cycle injuries, and 4,290 (30.9%) of the pedal-cycle injury visits had a primary diagnosis of a head or neck injury. During 2002-2004, ED charges associated with the primary diagnosis of a pedal-cycle injury for patients aged <6 years totaled \$1,093,258 (\$654,636 for visits with the primary diagnosis of a head and neck injury). Of the pedal-cycle injury ED visits for patients aged <6 years, 1,424 (69.6%) visits were for boys, and 622 (30.4%) visits were for girls. Injuries occurred more frequently during April-September (Figure). The youngest patient was aged 11 months, and the number of visits increased with age (Table). Forty visits were attributed to a pedal-cycle crash with a motor vehicle in traffic; 23 of these had a head injury as the primary diagnosis. Fortyeight hospitalizations occurred (17 for head and neck injuries), with charges totaling \$439,860 (\$151,853 for head and neck injuries). Traffic-related motor-vehicle crashes led to a

FIGURE. Number of emergency department visits for pedal-cycle injuries among children aged <6 years, by sex and month - Wisconsin, 2002-2004

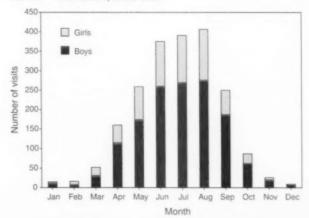


TABLE. Number of emergency department visits for pedal-cycle injuries, by type of injury and age of patient — Wisconsin, 2002–2004

			Age of pa	atient (yrs)			
Type of injury	<1	1	2	3	4	5	Total
Head and neck	1	65	122	194	392	531	1,305
Traumatic brain injury	0	1	7	16	22	28	74
Fracture	_	_	1	3	4	2	10
Internal organ	_	1	6	13	18	26	64
Other head, face, and neck	1	64	115	178	370	503	1,231
Fracture	_	_	_	_	2	8	10
Open wound	-	39	78	114	238	317	786
Superficial/Contusion	1	14	24	48	91	119	297
Unspecified	_	11	13	16	39	59	138
Non-head and neck	1	22	51	124	214	329	741
Vertebral column injury	_	_	-	1	3	2	6
Sprain/Strain	_	_		1	3	2	6
Torso	0	1	3	18	19	51	92
Fracture	_	-	_	1	_	_	1
Dislocation	_	_		_	_	1	1
Internal organ	_	-	_	1	1	1	3
Open wound	_	-	1	2	5	2	10
Superficial/Contusion	_	_	2	13	12	42	69
Unspecified		1	_	1	1	5	8
Upper extremities	1	13	21	67	116	172	390
Fracture	_	3	13	38	72	103	229
Dislocation	-	5	1	2	3	1	12
Sprain/Strain	-	1	-	6	5	14	26
Open wound	_	1	2	5	8	13	29
Amputation		1	named .	-		_	1
Superficial/Contusion	-	2	4	13	22	36	77
Unspecified	1	_	1	3	6	5	16
Lower extremities	0	8	26	38	73	101	246
Fracture	_	_	8	7	17	31	63
Dislocation	_	_	_	1	_	_	1
Sprain/Strain		_	2	9	9	7	27
Open wound	_	3	4	7	18	27	59
Amputation	_	_	1	_	_	_	1
Superficial/Contusion	_	4	10	14	26	32	86
Crushing	_	_	_	-	1	_	1
Unspecified	_	1	1	_	2	4	8
Other	0	0	1	0	3	3	7
Total	2	87	173	318	606	860	2,046

total of seven hospitalizations. During 2002–2004, no children aged <6 years died of pedal-cycle injuries.

No differences were observed in injury rates between either Port Washington or Milwaukee County and the rest of the state. During 2002–2004, four pedal-cycle ED visits were associated with Port Washington residents aged <6 years (annual incidence rate: 15 per 10,000); two of those visits were for a head injury. Milwaukee County, the most urban county in Wisconsin, had the same rate of ED visits for pedal-cycle injuries and pedal-cycle head and neck injuries as the rest of the state.

**Reported by:** R Glysch, MS, H Anderson, MD, Wisconsin Div of Public Health. W Daley, DVM, Office of Workforce and Career Development; A Wendel, MD, EIS Officer, CDC.

Editorial Note: During 2002–2004, Wisconsin children aged <6 years accounted for 2,046 ED visits for pedal-cycle injuries, and the primary diagnosis for nearly two thirds of these injuries was head or neck injury. Previous studies also have indicated that head injuries are the predominant category of injury in young pedal cyclists (1,9). Further study is needed to develop effective prevention strategies for young children to determine whether interventions targeted to children aged <6 years will provide a foundation for future safe cycling behaviors.

In Wisconsin, most pedal-cycle injury ED visits for children aged <6 years did not involve motor vehicles. These findings are consistent with a study using 1993–1997 data from the National Hospital Ambulatory Medical Care Survey (NHAMCS) (1). In addition, the NHAMCS study indicated that only 24% of bicycle-related injuries among children aged <4 years occurred in a street (1).

The findings in this report are subject to at least six limitations. First, ED data likely are underestimates of the total number of injuries and might be overestimates of the proportion of head and neck injuries. Parents might not seek medical attention for minor injuries, or they might take the child to their regular doctor, Second, the ED database does not contain information on whether the child wore a helmet or where the incident occurred, preventing analysis of these two factors. Third, the number of children in each community who are pedal cyclists is unknown, limiting injury rate comparisons between communities. Fourth, the assessment of the effect of bicycle helmet legislation was restricted by the small population affected by these laws. Fifth, this analysis did not distinguish between head and neck injuries. Finally, only the primary diagnosis was included in the analysis; head and neck injuries that were not primary diagnoses were excluded, potentially underestimating the total number of head and neck injuries.

Even young children are at risk for injuries from pedal-cycle injuries, which are predominantly head and neck injuries. Helmets might protect children from a subset of these injuries because helmets have been determined to prevent pedal-cycle-related head and facial injuries (2). Children aged <1 year should not be transported on a pedal cycle because they lack the neck strength to support a helmet (10). When fitted properly, the front part of the helmet should be low on the forehead so that if the child falls forward, the helmet strikes first, protecting the head and much of the upper face from impact. Although measures to improve bicycle safety often focus on teaching helmet use and safe bicycling techniques to children aged >5 years (1), the findings in this report demonstrate that potentially preventable injuries occur among children at younger ages.

#### Acknowledgments

This report is based, in part, on data contributed by the Wisconsin Bureau of Health Information and Policy.

#### References

- Powell E, Tanz R. Cycling injuries treated in emergency departments: need for bicycle helmets among preschoolers. Arch Pediatr Adolesc Med 2000;154:1096–100.
- Thompson DC, Nunn ME, Thompson RS, Rivara FP. Effectiveness of bicycle safety helmets in preventing serious facial injury. JAMA 1996;276:1974–5.

- CDC. Injury-control recommendations: bicycle helmets. MMWR 1995;44(No. RR-1):1–18.
- World Health Organization. International classification of diseases, ninth revision, clinical modification. Geneva, Switzerland: World Health Organization; 2003.
- US Census Bureau. 2002 annual population estimates. Washington, DC: US Census Bureau; 2003. Available at http://www.census.gov.
- Barell V, Aharonson-Daniel L, Fingerhut LA, et al. An introduction to the Barell body region by nature of injury diagnosis matrix. Inj Prev 2002;8:91–6.
- Macpherson AK, To TM, Macarthur C, Chipman ML, Wright JG, Parkin PC. Impact of mandatory helmet legislation on bicycle-related head injuries in children: a population-based study. Pediatrics 2002;110:60–4.
- Macpherson AK, To TM, Parkin PC, et al. Urban/rural variation in children's bicycle-related injuries. Accid Anal Prev 2004;36:649

  –54.
- Powell E, Tanz R. Injuries associated with bicycle-towed child trailers and bicycle-mounted child seats. Arch Pediatr Adolesc Med 2000;154:351–3.
- American Academy of Pediatrics. About bicycle helmets. Elk Grove Village, IL: American Academy of Pediatrics; 1994. Available at http://www.aap.org/family/thelmabt.htm.

# Measles — United States, 2005

Measles is a highly infectious, acute viral illness that can be complicated by severe pneumonia, diarrhea, and encephalitis and can result in death. In the prevaccine era, approximately 500,000 cases of measles occurred annually in the United States (1). During 2005, local and state health departments reported to CDC 66 confirmed cases of measles (incidence rate: less than one case per 1 million population), 34 of which were from a single outbreak in Indiana associated with infection in a traveler returning to the United States. This report describes the epidemiology of U.S. measles cases in 2005 and documents the absence of endemic measles and the continued risk for imported measles infections that can result in transmission within the United States. The findings underscore the need to maintain the highest possible measles vaccination coverage in the United States and to adhere to recommendations regarding measles vaccination.

### **Case Classification**

In accordance with state laws and regulations, health-care providers, laboratories, and other health-care workers report measles cases to state and public health departments; this information is forwarded to CDC. Data on variables such as vaccination status, age, complications, transmission setting, and serologic confirmation of cases also are collected.

In 2005, of the 66 cases reported, 44 (66%) were confirmed by laboratory testing, including 19 with detection of both IgM antibodies and virus (by polymerase chain reaction, culture, or both) and 25 with only measles IgM detected. The remaining 22 (33%) were confirmed by meeting the clinical case definition\* and by being linked epidemiologically to a laboratory-confirmed case.

Twenty-four (36%) of the 66 infections were imported,<sup>†</sup> including 17 (71%) in U.S. residents who acquired measles while traveling abroad and seven (29%) in non-U.S. residents who acquired the disease abroad and traveled to the United States. Measles was imported from 16 countries on four continents. Of the 24 patients with imported measles, eight (33%) were infectious during airline flights (i.e., rash onset occurred some time during the period 4 days before through 4 days after date of U.S. arrival). No secondary transmission was identified among flight crew members or passengers seated in the same row or the row in front of or behind the infectious person.

The other 42 (64%) cases were U.S. acquired, of which 38 (90%) were import linked and four (10%) had unknown sources of exposure. Thirty-three (87%) of the 38 import-linked cases were part of a single outbreak in Indiana, traced to exposure in Romania. Of the remaining five import-linked cases, two patients were linked to measles imported from Nigeria, and three were linked to only one other case. Overall, 62 (94%) of the 66 cases in 2005 were determined to be import associated (i.e., either imported or U.S. acquired but import linked).

# Age and Sex Distribution

Distribution of the 66 measles patients by age group was as follows: seven (10.6%) measles patients were aged <1 year, four (6.1%) 1–4 years, 33 (50%) 5–19 years, seven (10.6%) 20–34 years, and 15 (22.7%) ≥35 years. Thirty-one (47%) patients were male, and 34 (52%) were female; the sex of one patient was not recorded.

Generalized maculopapular rash lasting ≥3 days with fever ≥101.0"F (≥38.3"C) and one of the following: cough, coryza, or conjunctivitis (2).

<sup>†</sup> Cases among persons who were exposed and infected outside the United States (3).
<sup>§</sup> Asia, 13 cases: India and Saudi Arabia had two each; Armenia, Bangladesh, China, Indonesia, Pakistan, Thailand, and Yemen had one each; and two persons traveled to more than one country in Southeast Asia. Europe, six cases: Germany and Romania, two each; Belgium and France, one each. North America, three cases: Mexico, three. Africa, two cases: Kenya and Nigeria, one each.

U.S.-acquired cases are those in persons infected in the United States. These cases are subclassified into four groups: import linked (i.e., epidemiologically linked to an imported case); imported virus (i.e., cases that cannot be linked epidemiologically to an imported case but for which viral genetic evidence indicates an imported measles genotype); endemic (i.e., cases for which epidemiologic or virologic evidence indicates a chain of measles virus transmission that is continuous for ≥12 months within the United States); and unknown source (i.e., all other cases acquired in the United States for which an epidemiologic or virologic link to importation or to endemic transmission within the United States cannot be established after a thorough investigation) (3).

# Geographic and Temporal Distribution

The 66 cases were reported from 16 states. Five states reported more than two cases: Indiana (33 cases), New York (seven cases, including six from New York City), California (four cases), and Texas and Ohio (three cases each).

Cases were reported during 28 of the 52 reporting weeks (Figure). The longest period during which no cases were reported was 8 weeks, from week 38 through week 45. The median number of cases reported per week was one (range: zero to 14 cases). The maximum number of cases reported during a single week was 14 (week 22).

#### **Vaccination Status**

Of the 66 persons with measles, one had been vaccinated with 2 doses of a measles-containing vaccine and seven (11%) with 1 dose; 50 (76%) were unvaccinated, and eight (12%) had unknown vaccination status (Table). Fifteen of the 17 U.S. residents who acquired infection while traveling abroad had been eligible for vaccination with 2 doses of measles-containing vaccine, according to recommendations from the Advisory Committee on Immunization Practices (ACIP) (4).

FIGURE. Number of measles cases, by source of exposure and week — United States, 2005

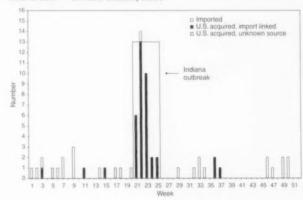


TABLE. Vaccination status of patients with measles, by source of exposure and residency status — United States, 2005

Vaccination	In	nported		
status	Visitor	U.S. resident	U.S. acquired	Total
2 doses	0	0	1	1
1 dose	1	4	2	7
Unvaccinated	4	9	37	50
Unknown	2	4	2	8
Total	7	17	42	66

However, four (27%) had been vaccinated with only 1 dose; eight (53%) had not been vaccinated (including three infants aged 11–12 months), and three (20%) had unknown vaccination status. Two of the 17 U.S. residents were ineligible because they were born before 1957 (one had not been vaccinated; the other had unknown vaccination status). Of the seven visitors (non-U.S. residents) with imported measles, one (14%) had been vaccinated with 1 dose; four (57%) had not been vaccinated (including one infant aged 8 months), and two (29%) had unknown vaccination status. Among the 42 U.S.-acquired cases, one patient had been vaccinated with 2 doses; two (5%) patients had been vaccinated with 1 dose, and 37 (88%) had not been vaccinated (including 29 [69%] persons aged 1–19 years). The vaccination status of two patients (5%) was not known.

#### **Outbreaks**

During 2005, three measles outbreaks (i.e., with three or more epidemiologically linked cases) were reported to CDC. These outbreaks affected three states and accounted for 40 (61%) of the 66 reported cases. An outbreak in Indiana with 34 cases (including one Illinois resident) resulted from an unvaccinated U.S. resident aged 17 years who returned home after acquiring measles infection in Romania. Of the 34 patients in this outbreak, 32 (94%) were eligible for vaccination. Of these, one patient aged 16 years had been vaccinated with 2 doses, a health-care worker aged 34 years had been vaccinated with only 1 dose, and 28 (88%) patients aged 1-19 years had not been vaccinated, primarily because their parents were concerned about potential adverse events associated with vaccination. Vaccination status for two patients, aged 43 and 45 years, was unknown. Two other patients were ineligible because of their ages: one was aged <12 months, and the other was born before 1957 and presumed immune to measles. Among the school-age patients (aged 5-19 years), 20 (71%) were schooled at home. Three persons were hospitalized during this outbreak, including the health-care worker, who was treated in the intensive care unit and recovered (5,6).

A second outbreak was traced to a visitor aged 6 years from Nigeria, who was hospitalized in Ohio. Cases of measles in two U.S. residents, an unvaccinated health-care worker and an unvaccinated person aged 89 years, were linked to the hospital setting. A third outbreak involved three U.S residents, two adults and a child aged 20 months, who had traveled together to a family reunion in Mexico and might have been exposed during air travel before returning to Texas. The adults had been vaccinated; the child had not been vaccinated.

# **Viral Genotypes**

Five genotypes of measles virus were identified in specimens from 19 patients representing 11 importations. Genotype D4 was identified in two travelers to France and Germany, two visitors from Romania and Yemen, and eight patients with U.S.-acquired measles linked to an imported case from Romania (the Indiana outbreak). Genotype B3 was identified in a refugee from Kenya and two of the three U.S. travelers to Mexico (7). Genotype D8 was identified in two U.S. residents returning from India. Genotypes D6 and D9 were isolated from a foreign visitor from Armenia and a child returning from Indonesia, respectively. Measles viruses in the four U.S.-acquired cases with unknown sources were not genotyped.

**Reported by:** G Dayan, MD, S Redd, P Rota, PhD, J Rota, MPH, W Bellini, PhD, Viral Diseases Div, National Center for Immunization and Respiratory Diseases (proposed); P Gould, MD, EIS Officer, CDC.

Editorial Note: The epidemiology of measles in 2005 supports previous conclusions that endemic transmission of measles has been eliminated in the United States (8,9). Measles incidence was low (less than one case per million population), measles cases were geographically isolated, and 95% of cases were linked to importations (i.e., internationally imported or U.S-acquired, import-linked cases). In addition, no predominant and recurring viral genotype was detected, and the measles genotypes detected, in most circumstances, had been circulating within the country of presumed exposure (10).

Half of all the cases in 2005 are traceable to one unvaccinated U.S. resident, who was infected during a visit to Romania of less than 2 weeks. This outbreak was the largest documented in the United States since 1996. All but two of the 34 patients in this outbreak were unvaccinated. The outbreak occurred because measles was imported into a population of children whose parents had chosen not to vaccinate their children because of safety concerns, despite evidence that that measles-containing vaccine is safe and effective (4). A major epidemic was averted because of high vaccination levels and a low rate of vaccine failure in the surrounding community. The cost of containing this outbreak was estimated at \$167,685 (5). This outbreak and other cases reported during 2005 likely could have been prevented had existing ACIP vaccination recommendations been followed (4). The index case traveler should have been vaccinated with 2 doses of measlescontaining vaccine before departure; exposed school-age children and personnel working in health-care facilities also should have had the recommended 2 doses before exposure.

The epidemiology of measles in 2005 highlights the need to maintain the highest possible measles vaccination coverage in the United States and to continue to address the concerns of those who choose not to be vaccinated or who choose not to vaccinate their children. Because 100% coverage in U.S. residents might never be achieved and because communities of unvaccinated persons continue to exist, accurate surveillance and rapid response to outbreaks are essential to preventing widespread transmission of imported measles. Moreover, providing assistance to other countries to control measles globally can limit the risk for imported measles in the United States.

#### References

- Strebel PM, Papania MJ, Halsey NA. Measles vaccine. In Plotkin SA, Orenstein WA, eds. Vaccines. 4th ed. Philadelphia, PA: Elsevier, 2004.
- CDC. Manual for the surveillance of vaccine-preventable diseases. 3rd ed. Atlanta, GA: US Department of Health and Human Services, CDC; 2002.
- Council of State and Territorial Epidemiologists. Revision of measles, rubella and congenital rubella syndrome case classifications as part of elimination goals in the United States. Position statement 06-ID-16. Available at http://www.cste.org/ps/2006pdfs/psfinal2006/06-ID-16final.pdf.
- CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1998;47(No. RR-8).
- Parker AA, Staggs W, Dayan GH, et al. Implications of a 2005 measles outbreak in Indiana for sustained elimination of measles in the United States. N Engl J Med 2006;355:447–55.
- CDC. Import-associated measles outbreak—Indiana, May–June 2005. MMWR 2005;54:1073–5.
- 7. Rota J, Lowe L, Rota P. Identical genotype B3 sequences from measles patients in 4 countries, 2005. Emerg Infect Dis 2006;12:1779–81.
- CDC. Epidemiology of measles—United States, 2001–2003. MMWR 2004;53:713–6.
- Papania MJ, Seward JF, Redd SB, Lievano F, Harpaz R, Wharton ME. Epidemiology of measles in the United States, 1997–2001. J Infect Dis 2004;189(Suppl 1):S61–8.
- World Health Organization. Global measles and rubella laboratory update. Wkly Epidemiol Rec 2005;80:384

  –8.

# Use of Cessation Methods Among Smokers Aged 16–24 Years — United States, 2003

Smoking cessation among adolescent smokers is relatively rare, with approximately 15.6% of smokers aged 12–19 years quitting smoking in a 4-year period (approximately 4% per year) (1). Rates for failed quitting attempts among younger smokers are higher than those for adults (43%) (2), with approximately 58% of high-school smokers having tried to quit at least once for 1 day or longer in the preceding year (3). To track the history of quitting behavior among smokers aged

16-24 years, Roswell Park Cancer Institute (Buffalo, New York) initiated the 2-year longitudinal National Youth Smoking Cessation Survey (NYSCS)\* in 2003. This report summarizes key findings from the survey regarding lifetime use of smoking-cessation methods. The findings indicated that smokers aged 16-24 years who had tried to quit were more likely to use unassisted quitting methods than assisted quitting methods; none of the unassisted methods are recommended by the Public Health Service (PHS) clinical guidelines for treatment of tobacco use and dependence, whereas most of the assisted methods are recommended for adults and have been determined to be effective. Many youths aged 16-24 years are trying to quit smoking but often underestimate the rapid progression to tobacco dependence; therefore, PHS clinical practice guidelines for treating tobacco use and dependence recommend that certain clinical interventions proven to be effective among adults be used in youth-based approaches to cessation (4). In addition, other components of comprehensive tobacco-control programs also increase smoking cessation and should be implemented at CDC-recommended levels (5) to lower tobacco use among youths and adults.

The 2003 NYSCS collected information on tobacco use and quitting practices through a random-digit-dialed, computer-assisted telephone interview survey of young smokers conducted by Westat (Rockville, Maryland) during June-November 2003. Persons aged 16-24 years who had smoked at least 20 cigarettes in their lifetimes and who had smoked at least once during the preceding 30 days were interviewed from randomly selected U.S. households with telephones. A total of 2,582 respondents completed the initial interview (69.6% response rate for all age-eligible smokers).† Smokers who had ever tried to quit were asked about their knowledge of, the perceived availability of, and use of assisted and unassisted quitting methods. Assisted methods include medications or obtaining assistance from a person, class, telephone counselor, or website. Respondents who were knowledgeable about a specific assisted method and perceived that the method was available were then asked whether they had ever used that method. Respondents who had ever tried to quit also were asked about their use of unassisted methods to quit smoking, including using self-help strategies and educational methods, such as pamphlets/videos, exercising, and changing smokingrelated behaviors (e.g., decreasing the number of cigarettes smoked or not buying cigarettes).

\* Funded by the Robert Wood Johnson Foundation, with additional analytical support provided by the National Cancer Institute and CDC.

<sup>&</sup>lt;sup>†</sup>Of 85,000 households in the sample, 60.0% responded, and 21.4% of the responding households had one or more persons aged 16–24 years. Respondents were given a reward for participation worth \$20 (either a check, restaurant coupons, or a store gift certificate).

Data were weighted to represent the population of U.S. smokers aged 16–24 years, according to the 2001–2002 Tobacco Use Supplement to the Current Population Survey. To ensure that respondents being analyzed were established smokers and had attempted to quit, only those who had smoked at least 100 cigarettes during their lifetimes and who had tried to quit smoking at least once were included in the analyses (1,827 respondents). Use of methods to quit also was examined by sex.

Of the 13 assisted methods (Table 1), only one (talking with a nurse, doctor, or dentist) was used by at least 20% of this age group, whereas six of the 11 unassisted (i.e., not recommended by PHS guidelines) methods were each used by at least 36% of respondents (Table 2). The most commonly used unassisted strategy (decreasing the number of cigarettes smoked) was tried by 88.3% of young smokers. The remaining five frequently used unassisted strategies were not buying cigarettes (56.0%), exercising more (51.0%), trying to quit with a friend (47.5%), telling others they no longer smoked (44.5%), and switching to light cigarettes (36.1%).

Females (24.9%) were more likely than males (15.6%) to seek help from health professionals but less likely to have tried nicotine gum (14.4% versus 20.3%) (Table 1). Females (52.1%) also were more likely than males (43.2%) to try to quit with a friend and to have used self-help pamphlets or videos (19.5% versus 12.5%). However, males (55.7%) were

more likely than females (46.0%) to exercise more as a strategy to quit and to switch to chewing tobacco, snuff, or other tobacco products (18.0% versus 1.6%) (Table 2).

Reported by: DC Barker, MHS, Barker Bi-Coastal Health Consultants, Calabasas, California. GA Giovino, PhD, Roswell Park Cancer Institute and SUNY Buffalo School of Public Health and Health Professions, Buffalo, New York. J Gable, MS, Research Triangle Institute, Atlanta, Georgia. C Tworek, PhD, Center for Public Health Improvement and Innovation, Pacific Institute for Research and Evaluation, Calverton, Maryland. CT Orleans, PhD, Robert Wood Johnson Foundation, Princeton, New Jersey. A Malarcher, PhD, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The NYSCS results indicate that smokers aged 16–24 years rely more on unassisted methods to try to quit than assisted methods recommended for adults by PHS clinical guidelines (4). The following six cessation methods are recommended by PHS for adults: 1) talk with a health professional, 2) use nicotine-replacement products, 3) use bupropion, 4) talk with a counselor, 5) attend a program or class, and 6) call a telephone helpline. Among NYSCS respondents, only 20.1% who had ever tried to quit had ever spoken with a health-care professional about quitting, the most commonly used assisted method. Among adult smokers who had been to a health-care professional and tried to quit during a given year, 61.8% were advised to quit using tobacco products (6).

TABLE 1. Percentage\* of current smokers† aged 16–24 years who had tried to quit at least once in their lifetimes, by sex and type of assisted quitting method§ ever used — National Youth Smoking Cessation Survey, United States, 2003

	Ove	erall		Male			Female	
Quitting method	%	(95% CIT)	No.**	%	(95% CI)	No. <sup>††</sup>	%	(95% CI)
Health professional	20.1	(±2.1)	132	15.6	(±2.7)	216	24.9	(±3.2)
Nicotine gum	17.4	(±1.9)	179	20.3	(±2.9)	131	14.4	(±2.6)
Nicotine patch	16.2	(±1.9)	160	17.3	(±2.7)	132	15.0	(±2.6)
Bupropion	6.7	(±1.3)	42	5.2	(±1.7)	63	8.2	(±2.1)
Counselor	4.8	(±1.0)	42	3.7	(±1.3)	62	5.8	$(\pm 1.6)$
Program/Class	2.9	(±0.8)	29	3.5	(±1.3)	24	2.3	$(\pm 1.0)$
Nicotine inhaler	2.6	(±0.8)	28	3.0	(±1.2)	20	2.2	(±1.1)
Nicotine lozenge	2.4	(±0.8)	27	2.9	(±1.2)	15	1.9	$(\pm 1.0)$
Telephone helpline	2.1	(±0.7)	16	1.7	(±0.9)	19	2.4	$(\pm 1.2)$
Internet quit site	1.3	(±0.6)	13	1.3	(±0.7)	10	1.4	$(\pm 0.9)$
Acupuncture/Hypnosis	1.2	(±0.6)	8	1.0	(±0.7)	12	1.5	$(\pm 0.9)$
Support group	0.7	(±0.4)	6	0.9	(±0.7)	6	0.6	(±0.5)
Nicotine spray	0.2	(±0.2)	3	0.3	(±0.4)	2	0.1	(±0.2)

\* Weighted to represent the population of U.S. smokers aged 16–24 years, according to the 2001–2002 Tobacco Use Supplement to the Current Population Supple

<sup>↑</sup> Persons who reported having smoked ≥100 cigarettes during their lifetimes and smoking at least one cigarette during the preceding 30 days

§ All methods other than nicotine lozenge, Internet quit site, acupuncture/hypnosis, and support group are recommended in the 2000 Public Health Service clinical guidelines for treating tobacco use and dependence. The Food and Drug Administration approved nicotine lozenges for use in smoking cessation in 2002.

¶ Confidence interval.

\*\* Denominators varied. Health professional, counselor, program/class, telephone helpline, Internet quit site, support group: N = 933; nicotine gum, nicotine patch, nicotine inhaler, nicotine lozenge, nicotine spray: N = 934; bupropion: N = 929; acupuncture/hypnosis: N = 932.

†† Denominators varied. Health professional, nicotine gum, nicotine patch, program/class, nicotine inhaler, nicotine lozenge, telephone helpline, acupuncture/hypnosis, support group, nicotine spray: N = 893; bupropion, N = 889; counselor, Internet quit site: N = 892.

TABLE 2. Percentage\* of current smokers<sup>†</sup> aged 16–24 years who had tried to quit at least once in their lifetimes, by sex and type of unassisted quitting method<sup>§</sup> ever used — National Youth Smoking Cessation Survey, United States, 2003

	0	verall		Male			Female	9
Quitting method	% (	(95% CI <sup>®</sup> )	No.**	%	(95% CI)	No.††	%	(95% CI)
Cut down on the amount of cigarettes you smoked	88.3	(±1.6)	801	86.3	(±2.4)	806	90.5	(±2.1)
Stopped buying cigarettes	56.0	(±2.5)	516	55.2	(±3.6)	515	56.8	(±3.5)
Exercised more	51.0	(±2.5)	510	55.7	(±3.5)	403	46.0	(±3.6)
Tried to guit with a friend	47.5	(±2.5)	412	43.2	(±3.5)	461	52.1	(±3.6)
Told others you no longer smoke	44.5	(±2.5)	419	44.8	(±3.5)	409	44.2	(±3.6)
Switched to light cigarettes	36.1	(±2.5)	316	34.6	(±3.4)	324	37.7	(±3.5)
Used pamphlets/videos	15.8	(±1.9)	111	12.5	(±2.4)	178	19.5	(±2.9)
Switched to chewing tobacco, snuff, or other tobacco	10.1	(±1.5)	157	18.0	(±2.7)	13	1.6	(±1.0)
Stopped hanging out with friends who smoke	8.4	(±1.4)	74	8.2	(±2.0)	82	8.6	(±2.1)
Attended events (e.g., health fairs or Great American								
Smokeout)	5.5	(±1.1)	39	4.3	$(\pm 1.5)$	59	6.7	(±1.8)
Used herbal or alternative therapies	5.0	(±1.1)	55	6.0	(±1.8)	33	3.9	(±1.4)

\* Weighted to represent the population of U.S. smokers aged 16–24 years, according to the 2001–2002 Tobacco Use Supplement to the Current Population Survey.

† Persons who reported having smoked ≥100 cigarettes during their lifetimes and smoking at least one cigarette during the preceding 30 days.

§ None of these methods are recommended in the 2000 Public Health Service clinical guidelines for treating tobacco use and dependence.

¶ Confidence interval.

\*\* Denominators varied. Cut down on the amount of cigarettes you smoked; used pamphlets/videos; attended events: N = 933. Stopped buying cigarettes; exercised more; tried to quit with a friend; told others you no longer smoke; switched to light cigarettes; switched to chewing tobacco, snuff, or other tobacco; stopped hanging out with friends who smoke; used herbal or alternative therapies: N = 934.

The Denominators varied. Cut down on the amount of cigarettes you smoked; exercised more; tried to quit with a friend; told others you no longer smoke; switched to light cigarettes; used pamphlets/videos; switched to chewing tobacco, snuff, or other tobacco; stopped hanging out with friends who smoke;

used herbal or alternative therapies: N = 893. Stopped buying cigarettes: N = 890. Attended events: N = 892.

Female respondents also were more likely than male respondents (24.9% versus 15.6%) to have talked with a health-care professional; this finding might be directly related to a difference in the number of visits typically made by young males and females to health-care professionals, a difference that has been reported for adults (7).

Use of certain unassisted strategies such as switching to light cigarettes or switching to chewing tobacco, snuff, or other tobacco products was common. The high proportion of respondents who tried to quit smoking by switching to light cigarettes (36.1% overall) or other tobacco products (18.0% among males) is a concern because such strategies might undermine successful cessation (8).

The findings in this report are subject to at least two limitations. First, these nationally representative estimates apply only to smokers aged 16–24 years living in households with telephones. Second, respondents were asked to identify themselves as smokers or nonsmokers and did not submit to any biochemical validation; some smokers might not have identified themselves as such. During the initial questions of the interview, respondents were unaware that participation in the survey was limited to smokers.

Because of the lack of sufficient evidence regarding the effectiveness of interventions for smokers aged 16–24 years, persons such as public health practitioners and health-care providers who work with smokers in this age range should consult CDC's Youth Tobacco Cessation: A Guide for Making

Informed Decisions, which summarizes what is known about tobacco-cessation interventions for youth and the role of these interventions in comprehensive tobacco-control programs (9). Clinical interventions that apply cognitive-behavioral approaches to behavior change seem the most promising (10). Additional research is needed to find effective clinical cessation interventions to help young persons stop smoking. For smokers aged <18 years, effective behavioral counseling approaches are essential because the Food and Drug Administration has not approved the use of any pharmacotherapy (e.g., nicotine-replacement products or bupropion) for smoking cessation in this age group. As these potential interventions are being researched and developed, comprehensive tobaccocontrol programs, which also include nonclinical interventions such as increasing excise taxes, promoting smoke-free air policies, conducting media campaigns with other community-based interventions, providing insurance coverage for proven treatments, and establishing telephone helplines, should be fully implemented in every state and territory to prevent youths from starting to smoke and to help youths and adults stop smoking (5).

#### References

- Zhu SH, Sun J, Billings SC, Choi WS, Malarcher A. Predictors of smoking cessation in U.S. adolescents. Am J Prev Med 1999;16:202–7.
- CDC. Tobacco use among adults—United States, 2005. MMWR 2006;55:1145–8.
- CDC. 2004 National Youth Tobacco Survey. Atlanta, GA: CDC; 2004. Available at www.cdc.gov/tobacco/NYTS/nyts2004.htm.

- Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence. Clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2000.
- Task Force on Community Preventive Services. Guide to community preventive services: tobacco. Atlanta, GA: CDC; 2006. Available at http://www.thecommunityguide.org/tobacco.
- Cokkinides VE, Ward E, Jemal A, Thun MJ. Under-use of smoking cessation treatments: results from the National Health Interview Survey, 2000. Am J Prev Med 2005;28:119–22.
- Tomar SL, Husten CG, Manley MW. Do dentists and physicians advise tobacco users to quit? J Am Dent Assoc 1996;127:259–65.
- Stratton K, Shetty P, Wallace R, Bondurant S, eds. Committee to Assess the Science Base for Tobacco Harm Reduction, Institute of Medicine. Clearing the smoke: assessing the science base for tobacco harm reduction. Washington, DC: National Academy Press; 2001.
- Milton MH, Maule CO, Yee SL, Backinger C, Malarcher AM, Husten CG. Youth tobacco cessation: a guide for making informed decisions. Atlanta, GA: US Department of Health and Human Services, CDC; 2004.
- McDonald P, Colwell B, Backinger CL, Husten C, Maule CO. Better practices for youth tobacco cessation: evidence of review panel. Am J Health Behav 2003;27(Suppl 2): S144–58.

#### CDC's 60th Anniversary

# Director's Perspective — James O. Mason, M.D., Dr.P.H., 1983–1989

# New Responsibilities Bring New Challenges

The growing momentum toward expanding CDC's responsibilities beyond infectious diseases gained strength during the 1980s. Tremendous advances in controlling infectious diseases had dramatically reduced illness and death from many long-standing health threats. In addition, the detrimental effects of chronic and other noncommunicable diseases on the nation's health were rapidly increasing. Programs to address cancer, heart disease, diabetes, and other leading killers became central to CDC's focus. Yet, for much of this decade, a newly emerging infectious disease would demand the skills and talents of persons across the agency. These new responsibilities led to additional funding, programs, staff, and partnerships for the growing agency, while introducing a host of new challenges.

In commemoration of CDC's 60th Anniversary, MMWR is departing from its usual report format. This is the third in a series of occasional commentaries by directors of CDC. The directors were invited to give their personal perspectives on the key public health achievements and challenges that occurred during their tenures.

## **Preventing Chronic Diseases**

Among the most targeted causes of chronic diseases was smoking. Steps to reduce the harmful effects of tobacco products had steadily increased throughout the U.S. Department of Health and Human Services (DHHS). CDC was heavily involved in these activities and faced pressures from industry and political fronts. In October 1984, Congress enacted the first major legislation on smoking and health in 15 years, the Comprehensive Smoking Education Act, Public Law 98-474. This legislation required stronger and more specific health warnings on all cigarette packages and advertisements and outlined specific responsibilities for DHHS. Among these were directives to expand activities on smoking and health and to issue a biennial report to Congress. In 1986, the DHHS Office on Smoking and Health was transferred to CDC and joined with CDC's programs to produce the first of these reports, Smoking and Health: A National Status Report (1), providing a comprehensive look at this important public health problem across national, state, and local levels. In his cover letter distributing the report to Congress, the Secretary of Health and Human Services urged all jurisdictions to adopt a minimum age of 18 years for persons to legally purchase tobacco products, stating that "Enactment and enforcement of such legislation could have a strong preventive effect on early uptake of cigarettes and other tobacco products." Included in the report were findings that 12 states had no age-related tobacco restrictions, and 14 of those with such laws had set the minimum age for purchasing tobacco products at younger than 18 years. The agency's expanding smoking-related programs advanced plans to create a chronic disease center at CDC, and in 1988, the Center for Chronic Disease Prevention and Health Promotion became a reality.

# Focus on Injury and Violence

CDC's programs to prevent injury and violence also were gaining prominence. As had been shown with chronic diseases, many of the same tools that had long proven effective in preventing and reducing infectious diseases (e.g., surveillance, epidemiologic research, education, and communication) could be used to address both unintentional and intentional injuries. In 1985, the Institute of Medicine published a report, Injury in America: A Continuing Public Health Problem (2), drawing attention to and recommending steps to stem this rising public health problem; among these steps was the establishment of a center for injury control at CDC. Broadening their expertise, CDC's violence program within the Center for Health Promotion and Education joined with CDC's injury program in 1986 to become the Division of Injury Prevention and Control in the Center for Environmental

Health. Through this division, CDC undertook additional steps to address these alarming threats (e.g., homicide, suicide, and motor-vehicle traffic deaths), including funding of injury control research centers at universities throughout the country to conduct research in prevention, acute care, and rehabilitation. These measures paved the way for establishment of the National Center for Injury Prevention and Control at CDC in 1992.

# **Agent Orange Studies**

As Bill Foege described in his Director's Perspective (3), CDC's expanding work toward reducing noninfectious health conditions brought with it many new challenges. Under legislation enacted in 1979 and 1981, Congress directed the Veterans Administration (VA) to conduct investigations into the health of U.S. Vietnam veterans in response to growing concerns from veterans that exposure to the defoliant mixture "Agent Orange," used widely in Vietnam, had affected their health and that of their children. In January 1983, CDC was assigned responsibility through an interagency agreement with the VA for designing, conducting, and analyzing data from these studies. Under authorization from Congress, CDC began three epidemiologic studies: the Agent Orange Exposure Study designed to evaluate the long-term health effects of exposure to herbicides, particularly Agent Orange, among Vietnam veterans; 2) the Vietnam Experience Study, a comprehensive study examining the occurrence of adverse health effects among Vietnam veterans; and 3) the Selected Cancers Study to determine whether Vietnam veterans were at increased risk for certain types of cancers possibly related to exposure to dioxin, a contaminant found in Agent Orange.

The Agent Orange Exposure Study was abandoned as unfeasible in 1987. Validation testing in a sample of veterans who served in Vietnam at the time and location of heaviest Agent Orange spraying found that none of the indirect methods for assessing exposure showed any meaningful association with current levels of dioxin in blood. Moreover, no method could be identified for using military records or self-reported exposure to distinguish between U.S. Army ground combat troops who were and were not exposed to Agent Orange in Vietnam.

The Vietnam Experience Study went beyond herbicide exposure to examine many factors that could have adversely affected Vietnam veterans, including the psychological stresses of war, possible exposure to various infectious diseases, reproductive outcomes, and possible misuse of drugs and alcohol. The study involved more than 7,000 men who had served in Vietnam during 1965–1971 and a similar number of veterans who had served elsewhere during the same period. The

study found that the Vietnam veterans more frequently reported health problems for themselves and their children, compared with the non-Vietnam veterans, but very few differences between the two groups were found on medical and laboratory examinations, including hospital birth records. However, problems such as depression, anxiety, and combatrelated post-traumatic stress disorder were found to be more common among the Vietnam veterans (4).

The Selected Cancers Study assessed the risk for non-Hodgkin's lymphoma, soft tissue sarcoma, Hodgkin's disease, nasopharyngeal cancer, and primary liver cancer among Vietnam veterans. Compared with men who did not serve in Vietnam, Vietnam veterans had an increased risk for non-Hodgkin's lymphoma but not for the other four cancers. Among those with non-Hodgkin's lymphoma, however, little difference could be found with respect to their reporting of experiences that might have been associated with increased their risk for exposure to Agent Orange. Although CDC remained focused on reporting the evidence and the limitations in its interpretation, controversy surrounded these studies and their findings.

#### Emergence of AIDS Brings Unprecedented Public Health Conflict

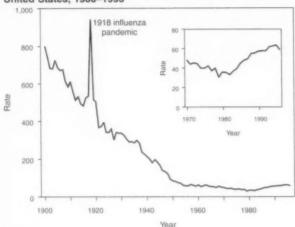
The formidable challenges presented by CDC's broadening responsibilities underscored the importance of strictly adhering to science in presenting findings and developing policy. This lesson would prove even more critical as a new infectious disease began emerging in young, homosexual men in the United States, challenging the public health community in unforeseen ways and eventually changing world health. Fully entrenched by the time it was recognized in 1981, the disease, eventually given the name acquired immunodeficiency syndrome (AIDS), reintroduced the public to fear of infectious diseases and divided the country across social, religious, and political lines.

Before AIDS, public fear of infectious diseases had largely subsided because of the availability and widespread use of vaccines and antibiotics. Many believed most infectious diseases were curable and no longer life-threatening, affording a new level of health not enjoyed by previous generations. AIDS abruptly corrected this misperception (Figure 1), emerging as a new health threat with devastating consequences and a host of medical, ethical, legal, and economic implications.

# **Developing Evidence-Based Guidelines**

Not only was the new condition baffling, the myriad associated diseases, termed "opportunistic infections" because they were usually only seen in persons with drug-suppressed or

FIGURE 1. Rate\* of infectious disease mortality, by year — United States, 1900–1996



SOURCE: Armstrong GL, Conn LA, Pinner RW. Trends in infectious disease mortality in the United States during the 20th century. JAMA 1999:281:61-6.

\* Per 100,000 population.

otherwise severely compromised immune systems, were unfamiliar to most physicians and scientists. However, within 1 year of the first case reports, a case definition had been developed and all major routes of transmission had been identified. In March 1983, CDC published the first set of guidelines for preventing the disease (5). Based on the best available science at the time, these recommendations proved essentially correct and have not been revised significantly.

In 1984, the cause of the disease was determined to be a previously unrecognized retrovirus, first termed human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV) and later renamed human immunodeficiency virus (HIV). In March 1985, a test to detect antibodies to the virus was licensed by the Food and Drug Administration (FDA) for use in screening donated blood and plasma. Although the test was not approved for individual testing, public health officials recognized that many at-risk persons would seek testing at blood banks to learn their infection status. By this time, sufficient funds had been authorized by Congress to enable CDC to begin funding AIDS prevention activities in state and local health departments. Through cooperative agreements, CDC awarded funds to 55 state and local health departments to establish alternate testing sites for at-risk persons to obtain antibody tests free of charge outside the blood-bank setting. Such sites were established both to decrease potential false-negative donations and to ensure that persons wishing to be tested would receive appropriate preand post-test counseling and referrals. Use of the antibody test for individual testing was approved by FDA in 1986. The ability to test persons for the virus offered new opportunities for prevention and for treatment to possibly delay the onset of the disease. Unfortunately, this medical advancement also unleashed a new set of fears among an already stigmatized population, especially regarding increased discriminatory actions related to education, employment, health care, and insurance.

Scientifically, these early years of AIDS were characterized by unprecedented progress toward understanding a new, highly complex infectious disease. In 1985, the first AIDS conference was held, and the World Health Organization formed a network of AIDS collaborating centers. By the end of 1986, CDC had published nearly 100 MMWR reports related to AIDS. These reports included recommendations to prevent transmission of the virus through transfusions, transplants, patient care, and perinatal exposure; workplace and schoolbased guidelines; and critical reports from state and local health departments outlining the epidemic's impact in their areas. CDC's AIDS surveillance programs were among the most comprehensive disease-tracking measures ever undertaken. These programs yielded data that highlighted growing epidemics outside of major metropolitan areas and among minority populations, allowing for more targeted prevention measures and funding.

# **Fear Affects Public Policy**

Despite solid scientific advances, no epidemic in history has engendered a greater level of controversy. Divisive views over the epidemic's earliest and most severely affected populations, homosexual/bisexual men and intravenous drug users, undoubtedly hindered progress on many fronts, including risk communication and funding for prevention and research. Some in Congress claimed that AIDS spending was exorbitant, disproportional to the magnitude of the problem, while others argued that inadequate funding was slowing research on testing, treatment, and vaccine development. The public also became involved in these disputes, disagreeing on transmission risks, populations that should be tested, and restrictions on infected persons. The media fueled their interests. In describing results from a 1985 poll of more than 2,000 persons, the New York Times reported that "51 percent of the respondents supported a quarantine of acquired immune deficiency syndrome patients, 48 percent would approve identity cards for those who have taken tests indicating the presence of AIDS antibodies, and 15 percent supported tattooing those with AIDS" (6).

Although these arguments were vocalized as focusing on rights of the public versus rights of AIDS patients, in reality they were driven by fear. The medical and scientific community had difficulty communicating the risks associated with this new disease with the same level of certainty demanded by the public. Studies conducted among family members of AIDS patients had provided strong evidence of the lack of transmission from casual contact. However, many persons, including lawmakers, believed otherwise and were not readily dissuaded.

In particular, school attendance by children with AIDS was the subject of intense debate. CDC's 1985 recommendations on education and foster care for children with HIV/AIDS stated that decisions regarding the type of education and care setting for infected children should be made on an individual basis but that "For most infected school-aged children, the benefits of an unrestricted setting would outweigh the risks of their acquiring potentially harmful infections in the setting and the apparent nonexistent risk of transmission of HTLV-III/LAV" (7). Soon after the release of these guidelines in late August 1985, the Washington Post ran an op-ed piece entitled, "Worry about the Survival of Society First; Then AIDS Victims' Rights," which was picked up by newspapers across the country (8,9). Playing to the public's fear and skepticism, the editorial argued that many of the laws that had been enacted to protect AIDS patients from discrimination were misguided and cited CDC's recent guidelines as remiss.

In many areas of the country, these recommendations were met with staunch opposition. In Florida, the parents of three HIV-infected hemophilic sons, Ricky, Robert, and Randy Ray, were plaintiffs in a federal lawsuit against their local school board to allow their children to attend public school. A week after the court's ruling in favor of the Rays, their home was burned down. In Indiana, the experiences endured by a young man named Ryan White would ultimately change public opinion on AIDS throughout the world and lead to specifically designated federal resources for AIDS patients through the 1990 Ryan White Comprehensive AIDS Resources Emergency (CARE) Act.

At CDC, measures to expand surveillance and case reporting and to develop new prevention guidelines required dedicated consensus building that went beyond the medical and scientific community to include affected persons, special interest and political groups, and the public. Throughout these processes, CDC worked to ensure that these new recommendations and guidelines reflected the best available science, a commitment that has served public health well. For example, CDC's 1988 recommendations for preventing HIV transmission in health-care settings (10) recommended that blood and certain body fluids from every single patient be viewed as potentially infectious for HIV or other bloodborne pathogens. These guidelines became known as "universal blood and body fluid precautions" or "universal precautions" and led to

permanent changes in health-care practices throughout the world.

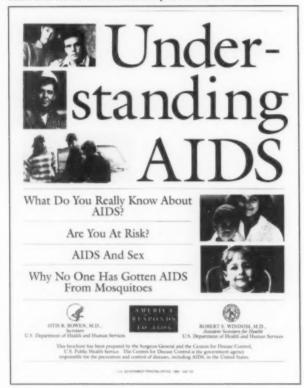
# Strengthening State and Local Public Health Infrastructures

By the mid-1980s, both funding and political support were available to launch widespread public information campaigns, viewed as critical in stemming the epidemic and enabling those already infected to receive treatment and other services. CDC's National AIDS Hotline was started in 1983 to enhance surveillance for the disease, but its role quickly expanded to address the urgent need for disseminating accurate and timely information. In 1987, CDC established the National AIDS Clearinghouse to distribute printed materials on AIDS. The same year, CDC launched America Responds to AIDS, a substantial, nationwide public information campaign that had been developed through extensive formative research (11). Over the next 4 years, five separate phases of informational materials were developed and released to the general public, ranging from basic information on the disease to specific information for different risk groups. The largest of these came in 1988, when more than 107 million copies of the brochure Understanding AIDS were delivered to homes and residential post office boxes in the United States (Figure 2). A Spanishlanguage version also was distributed in Puerto Rico and other predominantly Spanish-speaking areas. The brochure, developed by CDC in consultation with Surgeon General C. Everett Koop, other health experts, and public citizens, marked the first time the federal government had attempted to contact every resident directly by mail regarding a public health problem (12). Koop's open stance against smoking had made him a well-recognized public health official, and his commitment to educating the public on HIV/AIDS made him a highly effective and credible spokesperson in this effort.

In addition to expanded funding for AIDS surveillance and prevention activities at state and local health departments, CDC began funding national and regional minority organizations, community-based organizations, and the faith-based community for these activities in 1988–1989. This increased funding for extramural activities is reflected in CDC's budget for those years, which nearly tripled from fiscal years 1983–1989 (Figure 3) without a commensurate increase in full-time employees (Figure 4). The systems and services developed and implemented in response to the AIDS epidemic helped build and maintain public health infrastructures at multiple levels and would improve capabilities and serve as a model for other disease detection and prevention measures.

During 1981–1989, more than 100,000 cases of AIDS in the United States were reported to CDC, approximately one

FIGURE 2. CDC's *Understanding AIDS* brochure, mailed to each U.S. home and residential post office box in 1988



third of them in 1989 alone (13). Although cases were reported from all 50 states, the District of Columbia, and four U.S. territories, two thirds of the cases were reported from five states: New York, New Jersey, Florida, Texas, and California. In addition, although the epidemic had spread beyond the earliest risk groups of homosexual/bisexual men and intravenous drug users, these groups continued to account for nearly 90% of cases.

Today, the epidemic's global impact is staggering, with nearly 40 million persons living with HIV throughout the world (14). The fear of the disease that so adversely affected the U.S. response during the early years of the epidemic has largely subsided in this country, dissolving much of the resistance to new policies and procedures and enabling better acceptance and delivery of new prevention and treatment strategies. A clear example of this change is reflected in CDC's new HIV-testing recommendations (15). Published in September 2006, these evidence-based recommendations call for nearly universal testing of patients in health-care settings, a strategy that would not have been possible to put forward as recently as a decade ago.

FIGURE 3. CDC funding levels, by fiscal year, 1983-1989

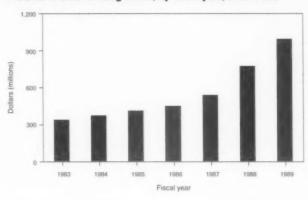
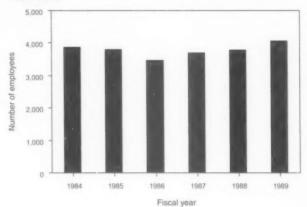


FIGURE 4. Number of full-time CDC employees, by fiscal year, 1984–1989



In many of the world's most heavily affected regions, however, fear and lack of education about the disease continue to impede prevention measures and stigmatize infected persons. As new funding and partners are united globally to address the pandemic, primary prevention measures must first focus on ending the fear.

# **An Expanded Agency**

Change, expansion, and growing domestic and international visibility characterized CDC's fourth decade. Exacting science and honest risk communication proved to be the agency's most effective prevention tools. Lessons learned from past successes and challenges will serve CDC well as its roles and responsibilities toward protecting the nation's health continue to expand.

#### References

- CDC. Smoking and health. A national status report. Rockville, MD: US Department of Health and Human Services, Public Health Service, CDC; 1986. DHHS publication no. (CDC)87-8396.
- Committee on Trauma Research, Commission on Life Sciences, National Research Council, Institute of Medicine. Injury in America: a continuing public health problem. Washington, DC: National Academy Press; 1985.
- CDC. CDC's 60th anniversary: director's perspective—William H. Foege, M.D., M.P.H., 1977–1983. MMWR 2006;55:1071–4.
- CDC. Health status of Vietnam veterans. Volume 1. Synopsis. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC; 1989.
- CDC. Current trends: prevention of acquired immune deficiency syndrome (AIDS): report of interagency recommendations. MMWR 1983;32:101–3.
- Poll indicates majority favor quarantine for AIDS victims. New York Times. December 20, 1985.
- CDC. Current trends. Education and foster care of children infected with human T-lymphotropic virus type III/lymphadenopathyassociated virus. MMWR 1985;34:517–21.
- Restak R. Worry about survival of society first; then AIDS victims' rights. Washington Post. September 8, 1985.
- Panem S. The AIDS bureaucracy: why society failed to meet the AIDS crisis and how we might improve our response. Cambridge, MA: Harvard University Press; 1988.
- CDC. Recommendations for prevention of HIV transmission in healthcare settings. MMWR 1987;36(No. SU-2):15–18S.
- Woods DR, Davis D, Westover BJ. "America Responds to AIDS": its content, development process, and outcome. Public Health Rep 1991;106:616–22.
- Mason JO, Noble GR, Lindsey BK, et al. Current CDC efforts to prevent and control human immunodeficiency virus infection and AIDS in the United States through information and education. Public Health Rep. 1988;103:255–63.
- Greenspan AL, Berkelman RL, Dondero TJ, Curran JW. Human immunodeficiency virus (HIV) infections in the United States. In: Gallo RC, Gilbert J, eds. The human retroviruses. San Diego, CA: Academic Press; 1991:193–211.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). Report on the global AIDS epidemic: a UNAIDS 10th anniversary special edition. Geneva, Switzerland: UNAIDS; 2006.
- CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. MMWR 2006;55(No. RR-14):1–17.

James O. Mason, M.D., Dr.P.H., was Director of CDC during 1983–1989 and served as Assistant Secretary for Health in the U.S. Department of Health and Human Services during 1989–1993 and as U.S. delegate to the World Health Organization during 1990–1993. During 1994–1999, he oversaw the religious and humanitarian activities of the Church of Jesus Christ of Latter-day Saints throughout sub-Saharan Africa. Dr. Mason currently resides in Salt Lake City, Utah, where he serves as president and chief executive officer of Avalon Health Care, Inc.

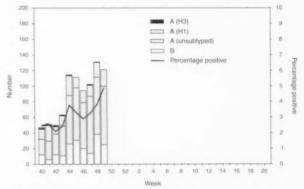
# Update: Influenza Activity — United States, October 1–December 9, 2006

During October 1–December 9, 2006, influenza activity remained low in the United States overall but increased in southeastern states. This report summarizes U.S. influenza activity\* since October 1, the beginning of the 2006–07 influenza season, and updates the previous summary (1).

#### Viral Surveillance

During October 1–December 9, 2006,<sup>†</sup> the World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System collaborating laboratories in the United States tested 27,474 specimens for influenza viruses, and 884 (3.2%) were positive (Figure 1). Of these, 689 (77.9%) were influenza A viruses and 195 (22.1%) were influenza B viruses. A total of 171 (24.8%) of the 689 influenza A viruses were subtyped; 162 (94.7%) of these were influenza A (H1) viruses, and nine (5.3%) were influenza A (H3) viruses. Influenza-positive tests were reported from 37 states in all nine surveillance regions; 441 (49.9%) of the 884 positive tests were reported from Florida.

FIGURE 1. Number\* and percentage of respiratory specimens testing positive for influenza reported by World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, by type and week — United States, October 1–December 9, 2006†



<sup>\*</sup>N = 27,474. As of December 13, 2006.

<sup>\*</sup>The CDC influenza surveillance system has seven components: 1) World Health Organization and National Respiratory and Enteric Virus Surveillance System collaborating laboratories, 2) U.S. Influenza Sentinel Provider Surveillance Network, 3) state and territorial epidemiologist reports, 4) 122 Cities Mortality Reporting System, 5) Emerging Infections Program, 6) New Vaccine Surveillance Network, and 7) influenza-associated pediatric mortality reports. † As of December 13, 2006; reporting is incomplete.

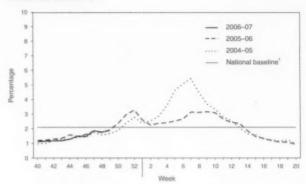
#### **Antigenic Characterization**

States are requested to submit a subset of their influenza isolates to CDC for further antigenic characterization. Since October 1, 2006, CDC has antigenically characterized 28 influenza viruses collected and submitted by U.S. laboratories, including 10 influenza A (H1) isolates from six states, one influenza A (H3) isolate, and 17 influenza B viruses from four states. Eight of the 10 influenza A (H1) viruses were characterized as A/New Caledonia/20/99-like, the influenza A (H1) component of the 2006-07 influenza vaccine, and two showed reduced titers with ferret antisera produced against A/New Caledonia/20/99. The influenza A (H3) virus was characterized as A/Wisconsin/67/2005-like, the influenza A (H3) component of the 2006-07 influenza vaccine. Influenza B viruses currently circulating can be divided into two antigenically distinct lineages represented by B/Victoria/02/87 and B/ Yamagata/16/88. The influenza B component of the 2006-07 influenza vaccine is B/Ohio/01/2005, which belongs to the B/Victoria lineage of viruses. Six (35.3%) of the 17 influenza B viruses characterized belong to the B/Victoria lineage of viruses; three were similar to B/Ohio/01/2005, and three had reduced titers with antisera produced against B/Ohio/ 01/2005. Eleven (64.7%) of the 17 influenza B viruses characterized belong to the B/Yamagata lineage of viruses. Nine (81.8%) of the 11 influenza B/Yamagata viruses were received from a single state.

# Influenza-Like Illness (ILI) Surveillance

During the current influenza surveillance season, weekly percentages of patient visits for ILI§ reported by approximately 1,300 U.S. sentinel providers in 50 states, New York City, Chicago, and the District of Columbia have ranged from 1.1% to 1.9%. During the week ending December 9, the percentage of patient visits for ILI was 1.9%, which is below the national baseline of 2.1% (Figure 2). Two regions have reported ILI above their region-specific baselines this season. For the week ending December 9, the East South Central region reported that 2.6% of patient visits were for ILI, compared with its baseline of 2.4%; the West South Central region reported 3.2%, compared with its baseline of 3.0%.

FIGURE 2. Percentage of visits for influenza-like illness (ILI) reported by the Sentinel Provider Surveillance Network, by week — United States, 2004–05, 2005–06, and 2006–07\* influenza seasons



\* As of December 13, 2006.

The national baseline was calculated as the mean percentage of visits for ILI during non-influenza weeks for the preceding three seasons plus two standard deviations. A non-influenza week is a week during which <10% of specimens tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the basis of state population. Use of the national baseline for regional data is not appropriate.

These reports marked the second week that the East South Central region has been at or above baseline and the fifth consecutive week for the West South Central region.

# **State-Specific Activity Levels**

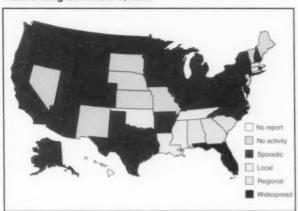
During the week ending December 9, 2006, influenza activity was reported as widespread\*\* in one state (Florida) (Figure 3). In addition, three states reported regional activity (Alabama, Georgia, and South Carolina); seven states reported local activity (Connecticut, Hawaii, Louisiana, Massachusetts, Mississippi, Oklahoma, and Tennessee); New York City and 30 states reported sporadic activity (Alaska, Arizona, Arkansas, California, Colorado, Delaware, Kentucky, Idaho, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Montana, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Utah,

<sup>&</sup>lt;sup>6</sup> Defined as a temperature of ≥100.0°F (≥37.8°C), oral or equivalent, and cough and/or sore throat, in the absence of a known cause other than influenza.

The national and regional baselines are the mean percentage of visits for ILI during non-influenza weeks for the previous three seasons plus two standard deviations. A non-influenza week is a week during which <10% of specimens tested positive for influenza. National and regional percentages of patient visits for ILI are weighted on the basis of state population. Use of the national baseline for regional data is not appropriate.

<sup>\*\*</sup> Levels of activity are 1) no activity; 2) sporadic: isolated laboratory-confirmed influenza cases or a laboratory-confirmed outbreak in one institution, with no increase in activity; 3) local: increased ILI, or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region with recent laboratory evidence of influenza in that region; virus activity no greater than sporadic in other regions; 4) regional: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least two but less than half of the regions in the state with recent laboratory evidence of influenza in those regions; and 5) widespread: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state with recent laboratory evidence of influenza in the state.

FIGURE 3. Estimated influenza activity levels reported by state epidemiologists, by state and level of activity\* — United States, week ending December 9, 2006



\*Levels of activity are 1) no activity, 2) sporadic: isolated laboratory-confirmed influenza cases or a laboratory-confirmed outbreak in one institution, with no increase in activity; 3) local: increased influenza-like illness (ILI), or at least two institutional outbreaks (ILI or laboratory-confirmed influenza) in one region with recent laboratory evidence of influenza in that region; virus activity no greater than sporadic in other regions; 4) regional: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least two but less than half of the regions in the state with recent laboratory evidence of influenza in those regions; and 5) widespread: increased ILI activity or institutional outbreaks (ILI or laboratory-confirmed influenza) in at least half the regions in the state with recent laboratory evidence of influenza in the state.

Virginia, Washington, West Virginia, Wisconsin, and Wyoming); and the District of Columbia and nine states reported no activity (Kansas, Maine, Missouri, Nebraska, Nevada, New Jersey, New Mexico, South Dakota, and Vermont). Regional influenza activity was reported for the first time this season during week 44 (by North Carolina), and widespread activity was reported for the first time during week 47 (by Alabama). To date this season, regional or widespread influenza activity has been reported by only six states (Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina), all in the southeastern area of the country. Influenza outbreaks have been reported by Alabama, Florida, and North Carolina, with most cases occurring among children.

# Influenza-Associated Pediatric Hospitalizations

Pediatric hospitalizations associated with laboratory-confirmed influenza infections are monitored by two population-based surveillance networks, the Emerging Infections Program (EIP) and the New Vaccine Surveillance Network (NVSN). No influenza-associated pediatric

hospitalizations have been reported from either network yet this season.  $^{\dagger\dagger}$ 

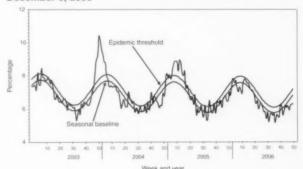
# Pneumonia- and Influenza-Related Mortality

For the reporting week December 3–9, 2006, pneumonia and influenza (P&I) was listed as an underlying or contributing cause of death for 6.3% of all deaths reported through the 122 Cities Mortality Reporting System (Figure 4). During the current influenza season, the weekly percentage of deaths attributed to P&I has ranged from 5.6% to 6.3% and has not exceeded the epidemic threshold for any week.

†† NVSN conducts surveillance in Monroe County, New York; Hamilton County, Ohio; and Davidson County, Tennessee. NVSN provides populationbased estimates of laboratory-confirmed influenza hospitalization rates in children aged <5 years admitted to NVSN hospitals with fever or respiratory symptoms. Children are prospectively enrolled, and respiratory samples are collected and tested by viral culture and reverse transcription-polymerase chain reaction (RT-PCR). EIP conducts surveillance in 60 counties associated with 12 metropolitan areas: San Francisco, California; Denver, Colorado; New Haven, Connecticut; Atlanta, Georgia; Baltimore, Maryland; Minneapolis/ St. Paul, Minnesota; Albuquerque, New Mexico; Las Cruces, New Mexico; Albany, New York; Rochester, New York; Portland, Oregon; and Nashville, Tennessee. EIP conducts surveillance for laboratory-confirmed, influenzarelated hospitalizations in persons aged <18 years. Hospital laboratory and admission databases and infection-control logs are reviewed to identify children with a positive influenza test (i.e., viral culture, direct fluorescent antibody assays, RT-PCR, or a commercial rapid antigen test) from testing conducted as a part of their routine care.

55 The seasonal baseline proportion of P&I deaths is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I that were reported by the 122 Cities Mortality Reporting System during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

FIGURE 4. Percentage of all deaths attributed to pneumonia and influenza reported by the 122 Cities Mortality Reporting System, by week and year — United States, week ending December 9, 2006



# Influenza-Related Pediatric Mortality

No influenza-related pediatric deaths have been reported through the National Notifiable Diseases Surveillance System for the 2006–2007 influenza season.

Reported by: WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza. L Blanton, MPH, L Brammer, MPH, S Wang, MPH, A Postema, MPH, T Wallis, MS, D Shay, MD, J Bresee, MD, A Klimov, PhD, N Cox, PhD, Influenza Div, National Center for Immunization and Respiratory Diseases (proposed), CDC.

Editorial Note: During October 1–December 9, 2006, the United States experienced a low level of influenza activity. Widespread and regional activity was reported in only six states in the southeastern area of the country. Outbreaks were reported primarily among children in Alabama, Florida, and North Carolina. Influenza virus isolates have been reported in all nine surveillance regions in the United States. Patient visits for ILI, represented by the Sentinel Provider Surveillance Network, and P&I mortality, represented by the 122 Cities Mortality Reporting System, have not exceeded national baseline levels. In addition, no influenza-associated hospitalizations from the EIP or NVSN surveillance systems have been reported to CDC and no influenza-related pediatric deaths have been reported through the National Notifiable Diseases Surveillance System.

Vaccination is the best method for prevention of influenza and its potentially severe complications. Although the optimal months for influenza vaccination are October and November, vaccination in December and beyond is recommended because influenza activity peaks in January or later during most seasons (2). The degree of antigenic match between the current vaccine strains and strains that will circulate this season will be determined as more strains become available for analysis. To date, influenza A (H1) viruses have been reported most frequently, and the majority of influenza A (H1) viruses characterized are well matched by the vaccine.

Influenza vaccine can be administered to any person who wants to reduce the likelihood of becoming ill with influenza. Annual influenza vaccination is particularly targeted toward persons at increased risk for influenza-related complications and severe disease (e.g., children aged 6–59 months, pregnant women, persons aged ≥50 years, and persons aged 6 months-49 years with certain chronic medical conditions) and their close contacts (e.g., health-care workers and household contacts of persons at increased risk, including contacts of children aged <6 months) (2). In addition, all children aged 6 months to <9 years who have not been previously vaccinated at any time should receive 2 doses of influenza vaccine (2). Vaccine should be offered throughout the influenza season, even after influenza activity has been documented in the community.

Influenza surveillance reports for the United States are posted online weekly during October–May and are available at http://www.cdc.gov/flu/weekly/fluactivity.htm. Additional information regarding influenza viruses, influenza surveillance, the influenza vaccine, and avian influenza is available at http://www.cdc.gov/flu.

#### **Acknowledgments**

This report is based on data contributed by participating state and territorial health departments and state public health laboratories, WHO collaborating laboratories, National Respiratory and Enteric Virus Surveillance System collaborating laboratories, the U.S. Influenza Sentinel Provider Surveillance System, the New Vaccine Surveillance Network, the Emerging Infections Program, and the 122 Cities Mortality Reporting System.

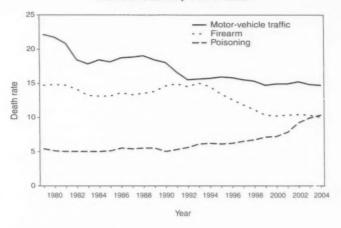
#### References

- CDC. Update: influenza activity—United States and worldwide, May 21–September 9, 2006. MMWR 2006;55:1021–3.
- CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-10).

# **QuickStats**

#### FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Age-Adjusted Death Rates\* for Leading Causes of Injury Death,† by Year — United States, 1979–2004



\* Per 100,000 population.

<sup>†</sup> Coded according to the *International Classification of Diseases*, *Ninth Revision*, during 1979–1998 and according to the *Tenth Revision* during 1999–2004. Additional information regarding classification of deaths according to intent and mechanism is available at <a href="https://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54">https://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54</a>, 10.pdf.

During 1979–2004, the three leading causes of injury death in the United States were motor-vehicle traffic, firearm, and poisoning (including drug overdose). In 2004, for the first time since 1968, when such data first became available, the number of reported poisoning deaths (30,308) and the age-adjusted poisoning death rate (10.3 per 1000,000 population) exceeded the number of firearm deaths (29,569) and the firearm death rate (10.0), respectively. During 1999–2004, the poisoning death rate increased 45%, whereas the firearm death rate declined 3%; during the same period, no change occurred in the rate (14.7) for motor-vehicle traffic deaths.

**SOURCE:** Mortality data from the National Vital Statistics Systems. Available at http://www.cdc.gov/nchs/deaths.htm.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States,

	D	C	5-year	Total c	ases ren	orted for	r previou	s vears	
Disease	Current	Cum 2006	weekly average <sup>†</sup>	2005	2004	2003	2002	2001	States reporting cases during current week (No
Anthrax		1	0			_	2	23	
Botulism:							-	20	
foodborne	_	13	1	19	16	20	28	39	
infant	_	80	2	90	87	76	69	97	
other (wound & unspecified)	2	46	1	33	30	33	21	19	AZ (1), CA (1)
Brucellosis	2	105	3	122	114	104	125	136	MN (1), CA (1)
Chancroid	1	28	1	17	30	54	67	38	NC (1)
Cholera	-	6	Ó	8	5	2	2	3	110 (1)
Cyclosporiasis <sup>1</sup>	1	115	2	716	171	75	156	147	MN (1)
Diphtheria	_	110	_			1	1	2	11114 (1)
Domestic arboviral diseases 19:							,	_	
California serogroup		7	1	80	112	108	164	128	
eastern equine		,	0	21	6	14	10	9	
	_	_	0	1	1	146	1	N	
Powassan St. Louis	-	3	0	13	12	41	28	79	
	_	_		13	12	41	20	79	
western equine	_	_	-	-		_	_	-	
Ehrlichiosis <sup>6</sup> :	47	420	25	700	E27	362	511	064	NIV (40) MAN (7)
human granulocytic	17	438	25	790	537			261	NY (10), MN (7)
human monocytic	9	395	11	521	338	321	216	142	NY (8), MO (1)
human (other & unspecified)	_	172	1	122	59	44	23	6	
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	-	8	1	9	19	32	34	_	
nonserotype b	-	80	5	135	135	117	144	-	
unknown serotype	2	193	4	217	177	227	153	_	PA (1), GA (1)
Hansen disease <sup>6</sup>	-	68	4	88	105	95	96	79	
Hantavirus pulmonary syndrome <sup>6</sup>	-	30	1	29	24	26	19	8	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>	6	235	7	221	200	178	216	202	NY (1), MI (1), IA (1), CA (3)
Hepatitis C viral, acute	3	719	41	751	713	1,102	1,835	3,976	MI (1), GA (1), CO (1)
HIV infection, pediatric (age <13 yrs) <sup>§,††</sup>	_	52	7	380	436	504	420	543	
Influenza-associated pediatric mortality <sup>8,58</sup>	_	40	0	45	_	N	N	N	
Listeriosis	7	697	16	892	753	696	665	613	RI (1), NY (2), OH (1), FL (1), WA (1), CA (1)
Measles <sup>77</sup>	-	45	1	66	37	56	44	116	
Meningococcal disease, invasive***;									
A, C, Y, & W-135	-	208	7	297	-	_	-	-	
serogroup B	1	125	6	157	-	_	_	_	SC (1)
other serogroup	1	22	1	27	_	_	-	_	FL (1)
Mumps	29	6,257	7	314	258	231	270	266	NY (1), PA (2), OH (1), MN (20), NE (1), KS (3),
									FL (1)
Plaque	-	16	0	8	3	1	2	2	
Poliomyelitis, paralytic	-	_	_	1	_	-	-	-	
Psittacosis <sup>§</sup>	_	19	0	19	12	12	18	25	
Q fever	2	158	2	139	70	71	61	26	CA (2)
Rabies, human	-	2	0	2	7	2	3	1	
Rubella	-	9	0	11	10	7	18	23	
Rubella, congenital syndrome	-	1	0	1	_	1	1	3	
SARS-CoVIIII		_	_	-	-	8	N	N	
Smallpox <sup>1</sup>	-	-	_	_	_	_			
Streptococcal toxic-shock syndrome <sup>®</sup>	_	86	3	129	132	161	118	77	
Streptococcus pneumoniae,		00	O.	160	106	101	110		
invasive disease (age <5 yrs)	20	1,036	30	1,257	1,162	845	513	498	NY (2), OH (1), IN (10), KS (1), WV (1), OK (1),
invasive disease (age <5 yis)	20	1,000	30	1,231	1,102	040	313	430	CO (2), AZ (2)
Syphilis, congenital (age <1 yr)	2	259	9	361	353	413	412	441	AZ (2)
Tetanus	1	22	1	27	34	20	25	37	OH (1)
		94	3	96	95	133	109	127	
Toxic-shock syndrome (other than streptococc	ai)= 2								GA (1), CA (1)
Trichinellosis	_	11	0	19	5	120	14	22	
Tularemia <sup>6</sup>	_	84	3	154	134	129	90	129	CT (4)
Typhoid fever	1	256	7	324	322	356	321	368	CT (1)
Vancomycin-intermediate Staphylococcus auri		3	_	2	-	N	N	N	
Vancomycin-resistant Staphylococcus aureus	-	-	-	3	1	N	N	N	
Yellow fever	-	-	0	-	_	_	1	-	

-: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts

Incidence data for reporting year 2006 are provisional, whereas data for 2001, 2002, 2003, 2004, and 2005 are finalized.

Calculated by summing the incidence counts for the current week, the two weeks preceding the current week, and the two weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

Not notifiable in all states.

Includes both neuroinvasive and non-neuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed) (ArboNET Surveillance).

Data for H. influenzae (all ages, all serotypes) are available in Table II.

Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (proposed). Implementation of

HIV reporting influences the number of cases reported. Pediatric HIV data will not be updated monthly for the remainder of this year due to upgrading of the national HIV/ AIDS surveillance data management system. Data for HIV/AIDS are available in Table IV quarterly.

Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases (proposed).

No measles cases were reported for the current week.

Data for meningococcal disease (all serogroups and unknown serogroups) are available in Table II.

111 Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed).

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005

			Chlamyd	ia†			Coccid	ioidomyo	osis			Cryp	otosporid	iosis	
			vious				Prev					Pre	vious		
Reporting area	Current week	Med Med	veeks Max	2006	Cum 2005	Current week	Med Med	Max	Cum 2006	Cum 2005	Current week	52 v Med	veeks Max	Cum 2006	Cum 2005
United States	10,779	19,400	35,170	920,951	922,611	180	151	1,643	7,785	4,742	31	68	594	4,995	7,506
New England Connecticut Maine <sup>9</sup> Massachusetts New Hampshire	1,069 613 50 297	640 173 42 289 39	1,550 1,214 65 606 71	32,499 9,751 2,189 14,764 1,911	31,503 9,582 2,166 13,912 1,778	N	0 0 0	0 0 0	N N	N N	1 - - 1	3 0 0 1	38 35 6 14 5	282 35 43 88 50	348 79 30 149 38
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	106	58 20	107 41	2,851 1,033	3,148 917	N	0	0	N	N	=	0	6 5	14 52	13 39
Mid. Atlantic New Jersey New York (Upstate) New York City Pennsylvania	1,592 779 383 430	2,409 355 504 698 790	3,696 496 1,727 1,567 1,106	115,765 16,110 24,058 36,999 38,598	114,156 18,447 23,067 37,082 35,560	N N N	0 0 0	0 0 0 0	N N N	N N N N	4 1 -3	10 0 3 2 4	444 3 441 7 17	566 11 172 108 275	3,266 58 2,791 146 271
E.N. Central Illinois Indiana Michigan Ohio Wisconsin	1,091 472 498 60 61	3,148 986 390 655 629 385	12,578 1,697 483 9,888 1,424 517	150,394 49,558 18,420 33,593 30,717 18,106	157,919 48,685 19,320 28,181 41,970 19,763		1 0 0 0 0	3 0 0 3 2	44 N 38 6 N	11 N 11 N	2 - - 2	16 2 1 2 5	109 21 18 9 33 53	1,227 174 99 135 346 473	1,615 159 85 112 766 493
W.N. Central lowa Kansas Minnesota Missouri Nebraska <sup>§</sup> North Dakota South Dakota	717 107 177 296 66 10 61	1,162 157 150 235 437 100 32 51	1,455 225 269 347 614 176 61 116	56,892 7,894 6,950 10,881 21,891 5,148 1,570 2,558	56,718 7,104 7,139 11,817 21,580 4,888 1,582 2,608	Z Z Z Z	0 0 0 0 0 0 0	12 0 0 12 1 0 0	1 N N 1 N N	4 N 3 1 N N N	4 2 1 1	12 1 1 3 2 1 0	77 28 8 22 21 16 4 7	839 171 80 223 178 93 9	609 121 40 144 245 28 1
S. Atlantic Delaware District of Columbia Florida Georgia Maryland <sup>§</sup> North Carolina South Carolina <sup>§</sup> Virginia <sup>§</sup> West Virginia	3,075 62 65 837 13 407 724 330 595	3,737 68 52 961 700 336 626 347 457 60	4,940 107 137 1,180 2,142 488 1,772 1,452 840 227	181,200 3,470 2,805 46,973 32,856 17,350 32,609 18,983 23,129 3,025	168,830 3,257 3,622 41,505 30,308 17,813 30,210 18,123 21,263 2,729	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 1 0 0 0 0 0	5 N   N   5 N N N	2 N 2 N N N N	16	15 0 0 6 5 0 1 1	67 3 2 32 18 3 11 13 6 3	1,135 15 15 542 258 20 96 124 55	743 6 17 339 147 34 91 24 68
E.S. Central Alabama <sup>§</sup> Kentucky Mississippi Tennessee <sup>§</sup>	575 51 125 399	1,420 408 163 365 509	1,945 760 691 807 605	71,035 19,944 8,854 18,321 23,916	67,282 16,270 7,999 20,557 22,456	N N	0 0 0 0	0 0 0	N N	N N	1 1 -	3 1 1 0 0	14 12 3 3 5	201 103 38 16 44	226 148 49
W.S. Central Arkansas Louisiana Oklahoma Texas <sup>§</sup>	636 104 302 230	2,176 154 225 238 1,459	3,605 335 607 2,159 1,898	103,080 7,762 12,111 12,291 70,916	105,537 8,258 16,522 11,045 69,712		0 0 0 0	1 0 1 0	1 1 N N	N N N	1 - 1	4 0 0 1 2	44 2 9 4 35	327 20 69 41 197	225 82 44 93
Mountain Arizona Colorado Idaho <sup>®</sup> Montana <sup>®</sup> Nevada <sup>®</sup> New Mexico <sup>®</sup> Utah Wyoming <sup>®</sup>	493 317 46 130	1,013 359 137 41 46 89 191 94 26	1,632 881 395 191 195 397 339 176 54	49,059 18,235 5,480 2,333 2,459 5,222 9,402 4,652 1,276	60,891 20,466 14,825 2,672 2,191 7,154 8,082 4,373 1,128	153 153 N N N	109 105 0 0 0 1 0	452 448 0 0 0 4 3 3	5,261 5,131 N N N 54 15 59	3,068 2,962 N N N 65 19	2 1 - - - 1	2 0 1 0 0 0 0 0 0 0 0 0	38 3 7 1 26 1 5 3	337 24 69 — 132 13 30 20 49	142 11 50 15 23 12 17
Pacific Alaska California Hawaii Oregon <sup>§</sup> Washington	1,531 49 1,081 5 130 266		5,079 152 4,231 136 315 604	161,027 3,844 126,581 4,983 8,608 17,011	159,775 4,133 123,952 5,338 8,535 17,817	27 27 N N	43 0 43 0 0	1,179 0 1,179 0 0	2,473 2,473 N N N	1,657 1,657 N N	=	1 0 0 0 1	52 1 14 1 7 38	81 4 73	332 197 69
American Samoa C.N.M.I. Guam Puerto Rico U.S. Virgin Islands	92	0 0 18 95 5	46 0 18 198 16	4,429 178	824 3,802	N	0 0 0 0	0 0 0	U N	N	U U	0 0 0 0	0 0 0	U U N	1

Cum: Cumulative year-to-date counts.

Med: Median. Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-dum incidence data for reporting year 2006 is provisional.
Chlamydia refers to genital infections caused by Chlamydia trachomatis.
Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005 (50th Week)\*

			Giardiasi	S				onorrhe	а		riaci	All age	s, all ser	zae, invas rotypes	sive .
Penarting area	Current	Prev 52 w		Cum 2006	Cum 2005	Current		eeks Max	Cum 2006	Cum 2005	Current		rious reeks Max	Cum 2006	Cum 2005
Reporting area	199	318	1.029	16,335	18.425	3,404	6.593	14,136	320,592		20	39	142	1,900	2,122
United States			75	1,127	1,627	206	108	288	5,512	5.688	20	2	19	140	155
New England Connecticut	6	22	31	280	369	151	42	241	2,317	2,445	_	0	9	44	45
Maine <sup>†</sup>	4	3	13	174	197	4	2	8	127	137	****	0	4 7	19 52	12 74
Massachusetts New Hampshire	_	9	18	357 28	710 62	43	47	86	2,343	2,453	_	1	2	10	8
Rhode Island <sup>1</sup>	2	1	25	113	107	8	9	19	484	425	_	0	7	6	7
Vermont <sup>†</sup>	-	3	12	175	182	-	1	4	63	58	-	0	2	9	9
Mid. Atlantic	43	63	254	3,177	3,311	320	651 102	1,014	31,095 4,580	32,900 5,502	6	8	30	372	414 88
New Jersey New York (Upstate)	36	24	13 227	339 1,226	1,155	109	121	455	6.027	6,738	2	3	27	133	114
New York City	1	15	29	835	862	96	175	377	9,394	9,945	1	2	6	87	76
Pennsylvania	6	15	32	777	851	115	226	401	11,094	10,715	3	3	8	152	136
E.N. Central	17	50	93 24	2,389 464	3,206 751	519 161	1,251	7,047	61,869 18,912	64,316 19,296	6	5	14	267 47	357 119
Indiana	N	0	0	N	N	_	161	249	8,142	7,790	1	1	10	75	65
Michigan	7	14	37	655	768	310	261	5,880	14,474	11,540 20,021	5	0	3	23 91	106
Ohio Wisconsin	10	16	32 40	788 482	782 905	25 23	299 133	685 172	14,124 6,217	5,669	5	2	4	31	44
W.N. Central	7	27	260	1,687	2,208	252	369	446	18,044	18.119	1	2	15	145	112
lowa	_	5	15	270	274	19	35	62	1,760	1,558	_	0	1	2	-
Kansas	2	3	11 238	194 489	205 969	62	40 61	124 105	1,961 2,816	2,481 3,383	1	0	2	16 77	17
Minnesota Missouri	1	9	28	511	511	139	189	252	9,672	9.131	-	0	6	32	33
Nebraska <sup>1</sup>	3	2	9	114	114	24	27	56	1,356	1,104	_	0	2	9	16
North Dakota South Dakota	-	0	7	17 92	19 116	8	3	6 15	120 359	122 340	_	0	3	9	3
	49	50	95	2,555	2,675	1,039	1,626	2,334	80.735	74.932	3	10	24	502	506
S. Atlantic Delaware	49	0	4	38	57	25	28	2,334	1.431	855	_	0	1	1	500
District of Columbia	-	1	4	62	54	38	35	59	1,824	2,082	_	0	2	8	10
Florida Georgia	21 28	20	44 28	1,093 569	931 728	430	453 351	547 1.014	22,191 16,504	19,379 14,220	1 2	3	9	156 99	129
Maryland <sup>†</sup>	-	3	11	203	200	121	126	189	6,319	6,774	_	1	5	66	72
North Carolina	N	0	0 7	N 99	N 104	176 136	314 150	766 704	16,625 8,545	14,552 8,431	_	0	9	53 33	74
South Carolina <sup>†</sup> Virginia <sup>†</sup>		7	50	455	550	93	132	288	6.330	7,923	_	1	8	65	52
West Virginia	_	0	6	36	51	14	19	43	966	716	_	0	4	21	27
E.S. Central	1	10	42	542	416	220	579	867	28,791	27,098	-	2	7	108	115
Alabama <sup>1</sup> Kentucky	1 N	6	30	320 N	192 N	14 45	189	313 268	9,193	9,011	_	0	5	33	17
Mississippi		0	0		- 14	161	143	435	7,234	6,914	_	0	1	4	-
Tennessee <sup>1</sup>	-	4	12	222	224	-	190	238	9,114	8,341	_	1	4	66	85
W.S. Central	4	5	31	289	311	314	898	1,430	44,753		-	1	15	65	112
Arkansas Louisiana	3	2	8 5	130 37	82 60	2 78	83 142	142 354	4,036 7,640		_	0	2	11	3
Oklahoma	1	2	24	122	169	125	87	764	4,624	4,390	_	1	14	47	60
Texas <sup>1</sup>	N	0	0	N	N	109	568	915	28,453		_	0	0	_	1
Mountain	20	30	67 36	1,610 155	1,496 145	130 91	220	428 198	11,155 4,524		3 2	4	8 7	187 84	200
Arizona Colorado	14	9	33	525	515	91	43		2.067		1	1	4	49	4
Idaho*	_	3	12	173	152	_	2	15	139	115	-	0	1	6	
Montana <sup>†</sup> Nevada <sup>†</sup>	1	2	11	107 94	110	2 37	3 25	135			_	0	0	2	1
New Mexico†	-	1	6	68	88	_	32	65			_	0	4	25	2
Utah	5	7	25	451	380	-	18				_	0	4	17	1
Wyoming†	_	1	4	37	29	_	2				_	0	1	4	
Pacific Alaska	52	59	202	2,959	3,175	404	790	967			1	2	15	114	14
California	37	42	105	2,097	2,256	316	654	834	31,909	32,931	-	0	9	27	5
Hawaii Orogoni	7	1	4	47 380	61	1	17	26			1	0	1	20	5
Oregon† Washington	8	8 7	90	380	406 344	20 60	28 76				_	0	6	56 2	5
American Samoa	U	0	0	U	U	U	0				U	0	0	U	1
C.N.M.I.	ŭ	0	0	ŭ	U	ŭ	0	0	U	U	Ü	0	0	Ŭ	1
Guam Puerto Rico	1	0	12	84	11 253	- 8	3			91	_	0	1 0		1
U.S. Virgin Islands	1	0	0	-	253	-	0				_	0	0	_	-

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-or Incidence data for reporting year 2006 is provisional.

Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005

Reporting area			A												
Reporting area		Prev	ious				Previ	В					gionello	515	
Reporting area	Current	52 w		Cum	Cum	Current	52 we		Cum	Cum	Current		vious veeks	Cum	Cum
	week	Med	Max	2006	2005	week	Med	Max	2006	2005	week	Med	Max	2006	2005
United States	15	66	245	3,170	4,137	21	84	574	3,960	4,647	21	41	127	2,307	2.141
New England	_	3	20	158	441	ANTON.	2	8	91	150	5	2	12	122	148
Connecticut	-	1	2	40	49	_	0	3	30	46	5	0	9	54	35
Maine† Massachusetts	_	0	2	6	7	_	0	2	22	14	_	0	2	9	7
New Hampshire	_	0	16	51 37	283 81	****	0	5 2	14	52	_	0	4	27	66
Rhode Island†	_	0	4	16	15		0	4	13	29	-	0	10	23	9
Vermont <sup>†</sup>	_	0	2	8	6	_	0	1	3	6	_	0	2	8	10
Mid. Atlantic	2	6	17	338	631	2	8	55	407	634	7	13	47	859	748
New Jersey	_	1	5	71	152	-	2	8	96	234		1	11	96	121
New York (Upstate)	1	2	14	90	96	1	1	43	59	57	5	5	30	316	209
New York City Pennsylvania	1	2	10	113	285	-	2	5	89	128	_	2	16	134	115
		1	5	64	98	1	3	9	163	215	2	5	19	313	303
E.N. Central	1	6	13	288 61	366	4	8	24	385	548	2	8	25	456	437
Indiana	inter.	0	5	29	124		0	17	61 56	152 40	_	0	3	21	62
Michigan	1	2	6	109	126	-	3	6	135	181	-	0 2	4	36 135	119
Ohio	-	1	4	52	50	4	2	10	125	130	2	4	19	228	190
Wisconsin	_	1	4	37	46	(man)	0	2	8	45	-	0	5	36	34
W.N. Central	-	2	30	123	118	_	3	22	153	269	_	1	15	76	96
lowa	_	0	2	11	20	-	0	3	16	28	-	0	3	10	8
Kansas Minnesota	_	0	5	26	16	_	0	2	10	30	_	0	2	6	3
Missouri	_	0	29	16 43	32 31	_	0	13	23	29	-	0	11	24	27
Nebraska <sup>†</sup>	_	0	2	18	18	-	0	6	81	150 24	- Internation	0	3	22	30
North Dakota	****	0	2	_		-	0	ő		-	_	0	1	9	5
South Dakota	-	0	3	9	1	_	0	1	3	8	-	0	1	5	21
S. Atlantic	_	10	29	533	704	6	23	66	1,104	1.348	6	9	19	442	409
Delaware	-	0	2	12	6	_	1	4	46	32	_	0	2	12	19
District of Columbia	-	0	2	8	4	-	0	2	9	11	-	0	5	33	12
Florida Georgia		4	13	208 59	281 123	5	8	19	399	476	6	3	9	159	109
Maryland <sup>†</sup>	_	1	6	61	78	1	3 2	10	168 140	198 151	_	0 2	3 7	24 89	39 110
North Carolina	-	0	20	99	84		ō	23	148	162	_	0	5	37	36
South Carolina <sup>†</sup>	_	0	3	23	42	_	2	7	79	151	_	0	1	5	15
Virginia <sup>†</sup> West Virginia	-	1 0	11	57	82	_	1	18	64	127	-	1	7	67	47
	_		3	6	4	_	0	18	51	40	-	0	3	16	22
E.S. Central Alabama†	-	2	8	124	234	-	7	20	376	356	-	2	9	101	86
Kentucky		0	5	20 31	43 24	_	2	12	137 67	87	-	0	2	13	14
Mississippi	_	0	1	9	19	_	1	4	37	67 51	2000	0	5 2	41	32
Tennessee <sup>†</sup>	-	1	5	64	148	_	2	7	135	151		1	7	44	37
W.S. Central	_	6	77	328	466	1	16	315	768	622		0	32	49	45
Arkansas	_	0	9	38	19	_	1	3	50	69	-	0	3	3	6
Louisiana	-	0	4	24	63	_	0	5	35	69	-	0	2	4	4
Oklahoma Texas <sup>†</sup>	partie.	0	3	9	5	1	0	17	72	44	_	0	6	7	7
	_	5	73	257	379	_	12	295	611	440	_	0	26	35	28
Mountain	1	5	17	255	334	1	3	16	135	183	1.	2	8	118	95
Arizona Colorado	1	3	16	156 38	188 47		0	4 5	34		-	1	4	38	23
Idaho†	_	0	2	9	21	_	0	2	13	56 16	-	0	2	22	20
Montana <sup>1</sup>	_	0	3	11	10	_	0	7	13	3	_	0	1	11	4
Nevada <sup>†</sup>	_	0	2	11	23	-	0	5	30	49	-	0	2	8	20
New Mexico <sup>1</sup> Utah	_	0	3	14	24	-	0	2	20	19		0	1	5	4
Wyoming <sup>†</sup>	_	0	2	13	20	1	0	5	28	38	1	0	6	28	14
	4.4		,					1		2	_	0	0		4
Pacific Alaska	11	18	163	1,023	843	7	11	61	541	537	-	1	9	84	77
California	7	15	162	916	721	6	0	3	397	360	_	0	0	84	73
Hawaii	_	0	3	12	24	_	0	1	6	9	_	0	0	04	73
Oregon <sup>†</sup>	2	1	5	46	44	-	1	5	78	96	N	0	0	N	N
Washington	2	0	13	49	50	1	0	18	51	64		0	0	_	_
American Samoa	U	0	0	U	1	U	0	0	U		U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	Ŭ	0	0	Ŭ	Ü
Guam Puerto Rico	1	0	0	-	2	-	0	0	Press.	18	-	0	0		_
U.S. Virgin Islands	1	0	0	32	65	1	0	8	32	52		0	1	2	-

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-defined for reporting year 2006 is provisional.

Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005

			Lyme dise	ase				Malaria			
		Pre	vious				Prev			_	
	Current		eeks	Cum	Cum	Current		eeks	Cum 2006	Cum 2005	
leporting area	week	Med	Max	2006	2005	week	Med	Max			
nited States	142	229	2,153	16,651	20,985	6	26	125	1,223	1,352	
lew England	11	23	780	2,873	3,949	1	1 0	11	48 11	74 20	
onnecticut	10	9	753 34	1,671 280	1,043 247	_	0	1	4	5	
aine†	_	0	12	33	2,323	-	0	3	19	39	
lassachusetts ew Hampshire	1	4	94	558	246	-	0	3	10	6	
hode Island		0	93	235	37	1	0	8	3	2	
ermont <sup>†</sup>	_	1	15	96	53	_	0	1	1		
lid. Atlantic	91	132	1,176	9,379	11,870	1	6	13	273 28	348 77	
lew Jersey		23	173	1,918	3,345 3,886	_	1	11	46	49	
ew York (Upstate)	73	59	1,150 18	3,987 164	397	_	3	9	152	186	
ew York City ennsylvania	18	35	231	3.310	4,242	1	1	4	47	36	
		9	150	1,443	1,728	1	2	7	130	146	
.N. Central linois	_	0	0		127	_	1	4	57	73	
ndiana	_	0	3	21	30	-	0	3	11	8	
fichigan	-	1	5	53	61	-	0	2	16 28	22 28	
hio	-	1	5	1.327	57 1,453	1	0	2	18	15	
/isconsin	_	8	146						61	46	
/.N. Central	31	6	169	845	935 91	_	0	32	2	8	
owa	-	0	8 2	87	91	_	0	2	7	7	
ansas finnesota	31	2	167	729	820	_	0	30	39	11	
Aissouri	-	ō	2	13	15		0	1	6	17	
lebraska†	-	0	2	11	4	-	0	1	5	3	
lorth Dakota	-	0	3	4	2	-	0	1	1	_	
outh Dakota	_	0	1	1						010	
. Atlantic	6	27	116	1,820	2,248	1	6	15	311 5	310	
elaware	5	7	28 7	465 59	639	_	0	2	5	11	
District of Columbia Florida	1	1	5	57	45	1	1	4	61	64	
Georgia	-	Ó	1	7	6	-	1	6	80	49	
Maryland <sup>†</sup>	_	12	73	877	1,218	_	1	5	68 28	99 38	
North Carolina	1000	0	4 2	29 18	44	-	0	8 2	10	10	
South Carolina <sup>†</sup>	_	0	28	294	251	_	1	9	52	33	
/irginia† Vest Virginia	_	0	44	14	17	_	0	1	2	3	
	_	0	3	36	36	-	0	3	24	30	
E.S. Central Alabama <sup>1</sup>	_	0	3	16	3	-	0	2	11	6	
Kentucky	_	0	2	7	5	_	0	1	4 4	10	
Mississippi	_	0	1	1		_	0	1 2	5	14	
[ennessee <sup>†</sup>	_	0	2	12	28	_	U				
W.S. Central		0	3	18	77	_	1	31	83	121	
Arkansas	_	0	1 0	_	5	_	0	1	5	5	
Louisiana Oklahoma		0	0	-	_	_	0	2	7	10	
Jikianoma Texas <sup>†</sup>	-	0	3	18	69	_	1	29	69	100	
	_	0	3	27	21		1	9	67	54	
Mountain Arizona	_	0	2	8	8	* Caretina	Ó	9	23	13	
Colorado	_	0	1.	1	_	_	0	2	16	25	
daho†	-	0	2	6	2	_	0	1	2		
Montana <sup>1</sup>	-	0	0	3	3	_	0	1	4	4	
Nevada¹ New Mexico¹		0	1	2	3		0	1	4	3 7	
Utah	_	0	1	6	2		0	2	17	7	
Wyoming <sup>†</sup>	_	0	1	1	3	-	0	0	_	2	
Pacific	3	4	13	210	121	2	4	13	226	223	
Alaska	_	0	1	3	4	apatro	0	4	23	6	
California	3	3	12	190	86	2	3	8	150	167 18	
Hawaii	N	0	0	N 14	N 21		0	2	12	13	
Oregon† Washington	_	0	2	3	10	_	0	5	33	19	
Washington				U	U	U	0	0	U	U	
American Samoa	U	0	0	U	U	Ü	0	0	Ü	Ŭ	
C.N.M.I. Guam	U	0	0	_	_	_	0	0	_	_	
Puerto Rico	N	0	0	N	N	-	0	1	1	4	
U.S. Virgin Islands	_	0	0	_		_	0	0	-	-	

Curn: Curnulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-defined data for reporting year 2006 is provisional.

Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005 (50th Week)\*

					ngococcal	disease, inv									
			All serog	roups				- 1	ınknown				Pertus	ssis	
		Prev					Prev					Prev	vious		
Reporting area	Current week	Med Med	Max	Cum 2006	Cum 2005	Current week	52 w Med	eeks Max	Cum 2006	Cum 2005	Current week	52 v Med	veeks Max	Cum 2006	Cum 2005
United States	9	19	85	1,022	1,162	7	12	58	667	716	183	257	2,877	12,536	22,339
New England	_	1	3	43	68	_	0	2	28	23	4	23	83	1.101	1.498
Connecticut	_	0	2	10	14	_	0	2	3	1	-	1	5	45	78
Maine <sup>†</sup> Massachusetts	_	0	1 2	7	2	-	0	1	4	2	-	1	11	96	54
New Hampshire	_	0	2	15	31 12	_	0	2	15	6	2	15	31 36	594 185	1,109
Rhode Island <sup>†</sup>	-	0	1	2	4	_	O	ō	_	-	2	0	17	70	36
Vermont <sup>†</sup>	-	0	1	3	5	_	0	0	-	2	-	1	14	111	88
Mid. Atlantic	2	3	13	159	148	2	2	11	124	113	80	35	137	1,799	1,302
New Jersey New York (Upstate)	_	0	2	16 36	31 41	_	0	2	16	31	70	3	13	185	186
New York City	_	1	4	58	24	_	0	5	58	14	73	15	123	890 64	520 106
Pennsylvania	2	1	4	49	52	2	1	4	46	44	7	13	26	660	490
E.N. Central		2	12	119	153		1	7	85	121	44	41	133	2,063	3,726
Illinois	_	0	4	18	33	-	Ó	4	18	33	_	10	22	453	898
Indiana	-	0	5	23	18	_	0	1	8	8	7	4	75	231	321
Michigan Ohio	_	0	3	21 43	34 43	_	0	1 3	10 35	18	12 25	11	38 29	602 609	1,128
Wisconsin	_	o	2	14	25	-	0	2	14	25	-	3	11	168	1,128
W.N. Central	_	1	4	62	81	***	0	2	21	35	8	23	552	1,160	3,899
lowa	-	0	2	20	15	_	0	1	6	1	-	5	15	257	1,084
Kansas	_	0	1	2	11	-	0	1	2	11	4	6	25	314	513
Minnesota Missouri	-	0	3 2	16 14	16 28	_	0	2	6 2	13	3	0	485 35	164 284	1,086
Nebraska†	-	0	2	6	6	_	0	1	4	3	1	2	9	95	607 290
North Dakota		0	1	1	1	_	0	1	1	1	_	0	25	26	139
South Dakota	-	0	1	3	4	_	0	0	_	-	-	0	4	20	180
S. Atlantic	5	4	14	191	211	3	1	7	83	96	2	18	46	954	1,389
Delaware District of Columbia	1	0	1	6 2	4 5	1	0	1	6 2	4	_	0	1	3	15
Florida	3	1	6	72	77	2	0	5	27	32	2	0	3	201	11
Georgia	_	0	3	15	17	_	0	3	15	17	_	0	3	25	48
Maryland <sup>†</sup> North Carolina	-	0	11	14 32	22 32	_	0	1 3	4	5	-	2	9	122	208
South Carolina	1	0	2	23	13	_	0	2	12	9	_	0	22	189 167	127 399
Virginia†	-	0	4	18	34	_	0	1	7	15	-	2	27	195	336
West Virginia	_	0	2	9	7	_	0	0	-	2	-	0	9	46	48
E.S. Central	_	1	4	46	56		1	4	37	44	-	6	28	395	505
Alabama† Kentucky	_	0	2	11	5	_	0	2	8	3	_	2	19	145	81
Mississippi	_	0	1	11	18	_	0	2	11	18	_	1	5	54 42	150
Tennessee <sup>1</sup>	_	0	2	20	26	_	0	2	14	16	-	3	10	154	214
W.S. Central	1	1	23	58	105	1	0	6	25	28	9	16	360	758	2.327
Arkansas	1000	0	3	10	15	_	0	2	7	3	_	1	21	75	296
Louisiana Oklahoma	1	0	2	7	31	1	0	1	4	8		0	1	13	51
Texas	_	0	16	30	14 45	_	0	0	14	15	9	0	124 215	28 642	1,977
Mountain		1	5	65	88		0	4	24	24	23	48	230	2.469	3.923
Arizona	_	Ó	3	17	34	_	0	2	10	11	9	7	177	469	93
Colorado	-	0	2	20	17	_	0	1	2	_	4	12	40	716	1,325
Idaho†	_	0	1	4	6	-	0	1	3	5	_	1	8	84	21:
Montana† Nevada†	_	0	1	5	14	_	0	0	2	2	_	2	9	109 66	583
New Mexico†	-	0	1	6	5	_	0	1	3	4	_	2	8	121	190
Utah	_	0	1	5	12	_	0	0	_	2	9	13	39	828	583
Wyoming <sup>1</sup>	_	0	2	4		_	0	2	4	_	1	1	8	76	50
Pacific	1	5	29	279	252	1	5	25	240	232	13	29	1,334	1,837	3,770
Alaska California	1	0	14	173	141	1	0	14	173	141	-	20	1.136	1,291	1.996
Hawaii	_	0	2	9	12	_	0	2	9	7	_	1	1,136	78	16
Oregon <sup>†</sup> Washington	_	0	7 25	62 32	51 44	_	0	4	43 12	51 29	13	2 5	8 195	102 302	617 852
	U	0		UE	77										
American Samoa C.N.M.I.	U	0	0	_	_	U	0	0	U	U	U	0	0	U	1
Guam	_	0	0		1	_	0	0	_	1	_	0	0	_	2
Puerto Rico	_	0	1	4	7	_	0	1	4	7	_	0	1	2	6
U.S. Virgin Islands	-	0	0	_	_	-	0	0	_	_	_	0	0	-	_

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-orded case incidence data for reporting year 2006 is provisional.

Contains data reported through the National Electronic Disease Surveillance System (NEDSS). Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum,

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005

		Ra	abies, ani	mal		Roo	ky Moun	tain spo	tted fever				imonello	osis	
		Prev				_	Previ			_	_		vious		-
Reporting area	Current	52 w Med	eeks Max	Cum 2006	Cum 2005	Current	Med Med	Max	Cum 2006	Cum 2005	Current	Med Med	weeks Max	2006	Cum 2005
United States	31	121	239	6,026	5,628	5	38	246	2,035	1,776	453	785	2,291	40,483	42,429
New England Connecticut	3	12	26 14	644 204	685 202	_	0	2	3	8	3	22	481 473	1,746 473	2,096 455
Maine <sup>†</sup>	1	2	8	119	61	N.	0	0	N	N	-	2	10	119	162
Massachusetts		3	17	178	325	-	0	1	1	6	3	15	53 25	782 208	1,117
New Hampshire	1	0	5	52 24	13 29	_	0	2	1	1	3	3	17	89	95
Rhode Island¹ Vermont¹	_	1	5	67	55	_	0	0	_	_	_	1	6	75	93
Mid. Atlantic	7	27	71	1,571	965	2	1	6	84	97	40	84	272	4,873	4,931
New Jersey	N	0	0	N	N	_	0	2	7 5	30	23	14 25	48 233	803 1,271	942
New York (Upstate) New York City	7	10	24	534 37	543 28	_	0	3	23	7	_	23	50	1,185	1,173
Pennsylvania	-	16	56	1,000	394	2	1	3	49	59	17	29	67	1,614	1,638
E.N. Central	_	2	18	162	170	_	0	6	41	41	57	100	192	4,969	5,554
Illinois	_	0	7	46	50	_	0	2	5	11	6	23 15	56 67	1,162 828	1,789 613
Indiana Michigan	_	0	2	11	12 38	_	0	1	3	6	7	18	34	923	928
Ohio	income.	Ó	9	58	70	_	0	4	25	21	44	23	56	1,282	1,305
Wisconsin	N	0	0	N	N	_	0	1	1	2	_	17	27	774	919
W.N. Central	_	6	20	303 57	313	1	2	15	212	154	25	48	109	2,574 436	2,494
lowa Kansas		1	5	81	77	_	0	1	1	5	3	7	16	360	358
Minnesota	_	Ó	6	40	68	1	0	2	5	2	9	11	60	694	541
Missouri	-	1	6	66	72	-	2	11	176	128	6	14	35	733	779
Nebraska <sup>1</sup>	_	0	0	24	31	_	0	5	25	7	7	3	9 46	191	218 38
North Dakota South Dakota	_	1	4	35	65	_	0	o	_	5	_	3	7	132	159
S. Atlantic	15	40	183	2,108	2,035	_	20	94	1,123	934	174	211	388	10,901	12,496
Delaware		0	0	-	-	_	0	3	21	7	100000	3	10	144	123
District of Columbia Florida	-	0	167	169	201	-	0	3	22	13	98	92	176	62 4,638	58 5,269
Georgia	6	5	24	239	251	_	1	5	49	85	21	33	70	1,715	1,896
Maryland <sup>†</sup>	_	7	13	318	371	-	1	6	75	73	_	12	29	686	788
North Carolina	3	9	22 11	496 174	454 217	_	17	87 5	817	560 72	51	32 17	130	1,613 968	1,670
South Carolina† Virginia†	6	12	27	601	473	_	1	13	102	113	_	20	57	941	1,100
West Virginia	_	2	7	111	68		0	2	3	9	-	2	19	134	188
E.S. Central	1	4	16	253	147	-	6	31	393	288	11	58	153	3,174	2,877
Alabama <sup>†</sup> Kentucky	1	0	8	82 29	78 17	_	2	11	133	72	5	20	84	1,286	701 478
Mississippi		O	2	4	5		O	1	4	18	_	11	42	720	890
Tennessee <sup>†</sup>	-	2	9	138	47	_	3	22	253	195	_	14	32	739	808
W.S. Central	5	11	34	568	833	2	1	161	119	218 130	23	74 15	922	4,079 908	4,239
Arkansas Louisiana	_	0	5	31	33		0	10	51 5	6	12	12	42	812	895
Oklahoma	5	1	9	66	75	2	0	154	38	52	11	8	48	491	394
Texas <sup>†</sup>	intesi	10	29	471	725	-	0	4	25	30		32	839	1,868	2,243
Mountain	-	3	27	207	268	-	0	6	53	34 19	33 14	50 17	88 67	2,483 869	2,349
Arizona Colorado	_	2	10	137	167 18	Matte.	0	1	2	4	15	12	30		567
Idaho¹		0	25	25	12	_	0	3	14	3	_	3	9	164	147
Montana <sup>†</sup>	_	0	2	14	15	_	0	2	2	1	_	2	10		
Nevada†	_	0	1 2	10	14	_	0	1 2	3	4	1	3	20 15		
New Mexico <sup>1</sup> Utah	-	0	1	11	15	_	0	2	6		3	5	15		
Wyoming <sup>†</sup>	-	O	2	8	17	_	0	1	7	3	_	1	4		
Pacific	_	4	12	210	212	_	0	1	7	2	87	114	426		
Alaska	-	0	4	16	202	_	0	0	5	_	74	89	292	72 4,469	
California Hawaii	_	3	0	169	202	-	0	0	5	_	1	5	17		
Oregon†	-	0	4	25	8	_	0	1	2	2	1	8	16	406	397
Washington	U	0	0	U	U	N	0	0	N	N	10		124		
American Samoa	U	0	0	U	U	U	0	0	U	U	U		0		
C.N.M.I. Guam		0		_	_	_	0	0	_	_	_	1	2		4
Puerto Rico	_	1	6	68	68	N	0	0	N	N	7		35	254	
U.S. Virgin Islands	*****	0	0	_	-	-	0	0	_	-		. 0	0	-	-

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-d\* Incidence data for reporting year 2006 is provisional.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005 (50th Week)\*

	Shiga			E. coli (S'	TEC)†			igellosi	S		Strepto	coccal d	isease, ir	nvasive, ç	group A
	0	Prev					Prev		-			Prev	ious		
Reporting area	Current week	Med Med	Max	Cum 2006	Cum 2005	Current	Med Med	eeks Max	Cum 2006	2005	Current	52 w Med	eeks Max	Cum 2006	Cum 2005
United States	94	53	297	3,026	3,156	160	254	1,013	13,075	14,847	57	92	282	4,520	4,339
New England	-	2	108	282	218	_	3	70	227	314	_	3	15	185	273
Connecticut Maine <sup>§</sup>	_	0	107	107	58 29	_	0	64	64	55 15	U	0	1 2	18	98
Massachusetts	_	1	9	82	85	_	2	11	128	189	_	2	6	101	14 124
New Hampshire	_	0	3	25	18	-	0	2	11	18	_	0	9	44	18
Rhode Island <sup>9</sup> Vermont <sup>§</sup>	_	0	2	8 2	7 21	_	0	3	15	20 17	-	0	3 2	8	9
Mid. Atlantic	63	5	107	403	351	8	16	72	803	1,208	5	18	43	14 866	10 840
New Jersey	-	0	3	3	73	-	3	34	242	308	_	2	8	122	176
New York (Upstate)	_	0	103	10	133	7	4	60	227	263	4	5	32	296	235
New York City Pennsylvania	48	0	25	35 197	17 128	1	5	13	248 86	405 232	1	6	13	141 307	165 264
E.N. Central	9	10	56	631	630	10	20	38	1.013	1.151	7	14	44	749	872
Illinois	_	1	7	81	139	_	7	21	376	392		3	11	144	295
Indiana Michigan	4	1	8	86 90	71	2	2	18	165	173	1	2	11	112	99
Ohio	5	3	18	196	93 168	7	3	8	143	235 132	6	3	12 19	204 237	207
Wisconsin	_	2	39	178	159	_	3	9	137	219	_	1	4	52	182
W.N. Central	10	11	35	627	525	17	36	77	1,700	1,715	10	5	57	343	275
Iowa Kansas	1	2	13	129 29	99 53	-	2	10	116 137	97 263	N	0	0	N	N
Minnesota	7	3	27	238	173	4	3	24	237	88	7	0	52	53 156	39 105
Missouri	-	0	1	1	97	10	9	69	643	998	-1	1	5	80	68
Nebraska <sup>§</sup>	_	0	8	55	63	2	1	14	121	149	2	1	4	33	24
North Dakota South Dakota	_	0	15 5	49	8 32	1	0	18	103 343	116	_	0	5 2	11	13
S. Atlantic	4	9	39	463	406	52	58	142	3.245	2.380	17	21	44	1.110	901
Delaware	-	0	3	12	9	_	0	2	10	11	_	0	2	10	6
District of Columbia Florida	4	0	1 29	3 94	1	31	0	2	17	15		0	2	18	11
Georgia	-	2	6	84	90 49	21	27 20	76 74	1,536 1,227	1,179 649	15	5	16 12	295 235	245 193
Maryland <sup>6</sup>		1	8	98	75	_	2	10	123	101	_	4	12	194	167
North Carolina	3	2	7	111	64	_	1	21	151	195	-	0	26	157	124
South Carolina <sup>§</sup> Virginia <sup>§</sup>	1	0	2	10	12 101	_	1 2	9	72 104	102 126	-	1 2	6	56	33
West Virginia	-	0	5	12	5	_	ō	2	5	2	_	0	11	118 27	96 26
E.S. Central	-	2	12	97	175	3	13	81	912	1,166	-	3	11	185	171
Alabama <sup>§</sup> Kentucky	_	0	5	47	29	3	4	72	435	216	N	0	0	N	N
Mississippi	_	1	12	97	76 8	_	4 2	15	230 91	314 101		0	5	36	33
Tennessee <sup>§</sup>	-	0	4	24	62	-	2	12	156	535	_	3	9	149	138
W.S. Central		1	52	76	115	3	36	596	1,741	3,548	1	7	58	348	321
Arkansas Louisiana		0	7	33	13	1	2	9 25	120	59 136	1	0	5	27	22
Oklahoma		0	17	43	30	2	2	286	131	618		0	14	98	115
Texas <sup>§</sup>	-	2	44	110	50	-	30	308	1,349	2,735	_	4	43	214	184
Mountain	2	5	16	307	306	37	25	86	1,441	938	16	11	77	610	564
Arizona Colorado	2	2	13	125 102	32 82	10	13	34 15	709 233	502 167	10	5 2	57 8	327 134	239
Idaho <sup>§</sup>	_	1	7	81	51	-	0	3	15	18	_	ō	2	8	3
Montana <sup>§</sup>	_	0	0	_	16	6	0	13	63	5	-	0	0	_	_
Nevada® New Mexico®	-	0	5	25	25 25	_	1 2	20 15	107 164	63 134	_	0	0 7	_	
Utah	_	1	14	121	65	1	1	6	81	134	2	1	7	68 69	83 64
Wyoming <sup>6</sup>	-	0	3	20	10	19	O	8	69	5	_	o	1	4	5
Pacific	6	2	50	140	430	30	39	148	1,993	2,427	1	2	9	124	122
Alaska California	_	0	0	(Martin)	156	0.7	0	104	1 604	13	_	0	0	-	-
Hawaii	_	0	18	18	136	27	31	104	1,684	2,114	1	0	0	124	122
Oregon <sup>§</sup>	_	2	14	11,1	156	-	1	31	119	124	N	0	0	N	V
Washington	6	2	32	122	105	3	2	43	138	142	N	0	0	N	V
American Samoa	U	0	0	U	U	U	0	0	U	7	U	0	0	U	L
C.N.M.I. Guam	U	0	0	U	U	U	0	0	U	20	U	0	0	U	L
Puerto Rico	-	0	0	_	2	-	0	2	13	9	N	0	0	N	N
U.S. Virgin Islands	_	0	0	-	_	_	0	0	_	_	_	0	0	_	_

Med: Median. Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

Incidence data for reporting year 2006 is provisional.

Includes *E. coli* O157-H7; Shiga toxin positive, serogroup non-0157; and Shiga toxin positive, not serogrouped.

Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005

	Strepto	Drug n	Syphilis, primary and secondary					Varicella (chickenpox)							
	Previous Current 52 weeks			0		Previous		0		Previo					
Reporting area	week	Med	Max	Cum 2006	Cum 2005	Current	52 we Med	Max	Cum 2006	Cum 2005	Current	Med Med	veeks Max	Cum 2006	Cum 2005
United States	58	51	333	2,426	2,473	96	175	334	8,631	8,257	668	835	2.857	40,544	28.734
New England	_	0	24	37	225	7	4	17	205	207	4	30	100	1,421	5,132
Connecticut	U	0	7	U	95	union.	0	11	53	46	U	0	48	U	1,641
Maine <sup>†</sup> Massachusetts	-	0	2 5	9	N 100	6	0	6	116	122	_	1	20 17	151 94	305 2,190
New Hampshire	_	0	0	-	_	1	0	2	13	15	4	6	47	479	329
Rhode Island <sup>1</sup> Vermont <sup>1</sup>	-	0	11 2	13	18	_	0	2	13	22	_	0	0	-	
	3	3		15	12		0	1	2	1		12	50	697	667
Mid. Atlantic New Jersey	N N	0	15	170 N	197 N	9	21	35	1,064	988 132	129	102	184	4,819	4,782
New York (Upstate)	2	1	10	62	75	4	3	14	142	74	_	0	0	_	_
New York City Pennsylvania	U	0 2	9	108	122	5	11	23 12	521 251	588 194	129	102	0	4.040	4 700
E.N. Central	11	11	44	577	608	12	16	39	845	893	358	307	184 587	4,819	4,782
Illinois		0	2	18	37	2	7	23	398	507	356	307	587	14,665	5,951
Indiana	4	2	21	159	178	_	1	5	88	59	-	0	475	475	_
Michigan Ohio	7	6	42	18 382	46 347	5	2	19	111	84 205	60 298	105 144	190 420	4,781 8,686	3,789
Wisconsin	Ń	0	0	N	N	1	1	4	66	38	230	10	52	655	1.613 449
W.N. Central	_	1	191	106	44	1	5	12	253	248	75	28	98	1,779	662
lowa	N	0	0	N	N	_	0	3	19	9	N	0	0	N	N
Kansas Minnesota	N	0	191	N 60	N	_	0	3	26 29	18 69	21	4	24	341	_
Missouri	_	1	3	41	36	1	3	8	158	146	54	20	82	1,285	463
Nebraska†		0	1	1	2	***	0	2	7	4	_	0	0	_	_
North Dakota South Dakota	_	0	0	4	3		0	1	13	1	-	0	17 14	45 108	65 134
S. Atlantic	38	26	53	1,278	1,050	37	41	186	2.041	2.076	30	88	860	4.246	2,753
Delaware	_	0	0	-	3	-	0	2	17	10	_	1	6	64	32
District of Columbia Florida	28	0 14	3 36	27 710	17 556	_	2	9	117	104	2	0	5	48	39
Georgia	9	7	29	436	356	8	15	23 147	698 377	694 483	_	0	0	_	_
Maryland <sup>†</sup>	-	0	0	-		10	5	14	283	305	_	0	0	-	_
North Carolina South Carolina <sup>†</sup>	N	0	0	N	N	10	5	17 5	292 66	263 82	_	0	0	4 000	
Virginia†	N	0	0	N	N	6	3	17	185	132	11	19 28	53 812	1,082 1,598	606 958
West Virginia	1	1	14	105	118	-	0	1	6	3	17	27	70	1.454	1,118
E.S. Central		2	13	137	181	18	13	26	698	475	_	2	23	152	291
Alabama <sup>†</sup> Kentucky	N	0	0	N	N 32	6	5	19	313 71	164 52	N	2	23	150	291
Mississippi	_	0	0	number.	1	8	1	7	77	47		0	1	N 2	N
Tennessee <sup>1</sup>	_	2	13	137	148	_	5	13	237	212	N	0	0	N	N
W.S. Central	-	0	5	24	116	6	29	54	1,493	1,216	_	194	1,757	10,674	6,631
Arkansas Louisiana	_	0	3	12 12	14 102	4	1	6 27	76 290	52 271	-	14	110	926 67	43 129
Oklahoma	N	Ö	0	N	N	1	1	6	73	38	_	0	0	-	129
Texas*	N	0	0	N	N	1	22	34	1,054	855	_	174	1,647	9,681	6.459
Mountain	6	2	9	97	52	4	8	25	407	411	72	59	137	2.788	2,532
Arizona Colorado	N	0	0	N	N	_	3	16	180	164 46	47	30	76	1,435	1,773
Idaho†	N	0	0	N	N	_	0	1	2	20	-	0	0	1,435	1,775
Montana¹ Nevada¹	_	0	1	_	1	4	0	1	1	7	_	0	13	27	-
New Mexico†	_	0	0	-		4	2	12	109	108 56	_	0	34	350	212
Utah	6	1	9	54	26	-	0	2	9	10	25	16	65	917	494
Wyoming <sup>†</sup>	_	1	4	43	25	_	0	0	_	man.		0	11	59	53
Pacific Alaska	_	0	0		_	2	34	51	1,625	1,743	_	0	0	-	_
California	N	0	0	N	N	1	29	43	1,402	1,537	_	0	0	_	_
Hawaii Oregon†	N	0	0	- N.	-	-	0	2	17	11	N	0	0	N	٨
Washington	N	0	0	N	N	1	0 2	10	25 172	39 149	N	0	0	N	1
American Samoa	-	0	0	_	_	U	0	0	U	U	U	0	0	U	t
C.N.M.I.	_	0	0	-	-	U	0	0	Ü	U	Ü	0	0	U	i
Guam Puerto Rico	N	0	0	N	- NI	_	0	0	-	3	-	2	4	-	438
U.S. Virgin Islands	14	0	0	IN	N	_	3	10	137	211	2	7	47	330	688

Cum: Cumulative year-to-date counts.

Med: Median.

Max: Maximum.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-case incidence data for reporting year 2006 is provisional.

Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending December 16, 2006, and December 17, 2005

	West Nile virus disease† Neuroinvasive Non-neuroinvasive													
				sive										
	Previous Current 52 weeks			0	0	0		rious	0	0				
Reporting area	Current	Med Med	Max	Cum 2006	2005	Current	Med Med	Max	Cum 2006	Cum 2005				
nited States	_	1	176	1,396	1.191		1	383	2,459	1,683				
ew England	_	0	3	9	9		0	2	3	4				
onnecticut	_	0	3	7	4	-	0	1	2	2				
aine <sup>5</sup>	_	0	0	_	-		0	0	_	_				
assachusetts	-	0	1	2	4	_	0	1	1	2				
ew Hampshire	-	0	0	_	_		0	0	_	_				
hode Island <sup>§</sup> ermont <sup>§</sup>	_	0	0	_	1	_	0	0	-	-				
										00				
lid. Atlantic	_	0	11	26	47 3	-	0	4	10	22				
ew Jersey ew York (Upstate)		0	5	8	19		O	1	3	5				
lew York City	-	0	4	8	11	-	0	2	4	3				
ennsylvania	_	0	2	8	14	_	0	1	1	11				
.N. Central	_	0	43	236	259	_	0	22	99	156				
linois	_	0	21	116	137	_	0	19	70	115				
ndiana	_	0	7	26	11	-	0	2	7	12				
lichigan	_	0	10	47	54	-	0	1	2	8				
hio	-	0	11	36	46	_	0	3	11	15				
Visconsin	-	0	2	11	11	-	0	2	9	6				
V.N. Central	-	0	35	216	169	_	0	79	477	463				
owa	_	0	3	21	14	_	0	4	13	23				
Cansas	_	0	3	17	17	_	0	3 7	13	N				
Minnesota	-	0	6 13	30 47	18 17	_	0	2	35 12	27 13				
Missouri Nebraska®	_	0	9	43	55	_	0	37	212	133				
Iorth Dakota		0	5	20	12		0	28	117	74				
South Dakota	_	0	7	38	36		0	22	75	193				
6. Atlantic	_	0	2	14	34	-	0	4	7	29				
Delaware	_	0	ō		1	-	O	ō	_	1				
District of Columbia	_	0	0		3	-	0	1	1	2				
Florida	-	0	1	3	10	_	0	0	_	11				
Georgia	-	0	1	2	9		0	3	5	11				
Maryland <sup>9</sup>	- Territori	0	2	7	4	-	0	1	1	1				
North Carolina	9000	0	0		2	_	0	0		2				
South Carolina <sup>§</sup> Virginia <sup>§</sup>	-	0	0	1	5	_	0	0	_	1				
West Virginia		0	1	1	-	N	0	0	N	N				
E.S. Central	-	0	14	114	65		0	16	96	38				
Alabama <sup>6</sup>	-	0	2	7	6		0	0	50	4				
Kentucky	_	0	ō	5	5	_	0	1	1	_				
Mississippi	-	0	10	87	39	_	0	16	93	31				
Tennessee <sup>§</sup>	-	0	4	15	15	-	0	2	2	3				
W.S. Central		0	59	353	157	_	0	26	211	150				
Arkansas	_	0	4	23	13	_	0	2	5	15				
Louisiana	-	0	14	89	_	_	0	9	83	54				
Oklahoma	-	0	6	27	17	_	0	4	18	14				
Texas <sup>9</sup>	-	0	38	214	127	_	0	15	105	67				
Mountain		0	61	342	145	_	0	222	1,321	240				
Arizona	_	0	9	48	52	_	0	12	58	61				
Colorado	-	0	10	63	21	-	0	51	269 752	85 10				
daho <sup>§</sup>	_	0	30	111	3 8	_	0	151	21	17				
Montana <sup>§</sup> Nevada <sup>§</sup>	_	0	9	34	14	_	0	13	75	17				
New Mexico		0	1	3	20	-	0	1	5	13				
Jtah	_	0	8	56	21	-	0	17	101	31				
Nyoming	_	0	7	15	6	-	0	8	40	6				
Pacific	_	0	15	86	306	-	0	45	235	581				
Alaska	-	0	0	(March )			0	0		-				
California	-	0	15	79	305	_	0	33	182	575				
Hawaii	_	0	0	_	-	_	0	0		_				
Oregon <sup>®</sup>		0	2	7	1	_	0	12	50	6				
Washington		0	0	-	-									
American Samoa	U	0	0	U	U	U	0	0	U	U				
C.N.M.I.	U	0	0	U	U	U	0	0	U	U				
Guam Puerto Rico	_	0	0	- money	-	-	0	0	-	_				
	_	0	0			the state of the s	0	0	100000	10000				

C.N.M.I.: Commonwealth of Northern Mariana Islands.

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. — No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
Incidence data for reporting year 2006 is provisional.
Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (proposed) (ArboNET Surveillance).
Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

			causes, b					0th Week)	All causes, by age (years)						
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I <sup>†</sup> Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I
New England	566	397	125	25	7	12	57	S. Atlantic	1,192	725	283	81	42	61	60
Boston, MA	138	85	40	7	2	4	20	Atlanta, GA	171	81	43	9	4	34	3
Bridgeport, CT	37	27	7	2	-	1	4	Baltimore, MD	153	84	47	17	3	2	8
Cambridge, MA	15	11	2	2	-	-	1	Charlotte, NC	115	77	27	8	1	2	12
Fall River, MA	24	21	3	_		_	2	Jacksonville, FL	190	128	37	11	8	6	5
Hartford, CT	53 27	35	6	7	3	2	7	Miami, FL	60	31	12	9	5	3	4
Lowell, MA Lynn, MA	10	19	6	2	_	_	7	Norfolk, VA	34	23	8	1	1	1	1
New Bedford, MA	18	15	2	1		_	2	Richmond, VA	55 46	38	10	4	1	2	-
New Haven, CT	43	30	10	1		2	6	Savannah, GA St. Petersburg, FL	57	40	9	3	2	2	2
Providence, RI	69	54	14	_	-	1	3	Tampa, FL.	186	129	42	5	6	4	12
Somerville, MA	4	3	_	-	1	_	_	Washington, D.C.	99	47	31	9	8	4	2
Springfield, MA	47	31	11	3	1	1	_	Wilmington, DE	26	17	8	1	_	_	3
Waterbury, CT	29	20	8	_	-	1	1						- 1		
Worcester, MA	52	39	13	and the same of	-	-	4	E.S. Central	861	562	218	51	14	16	59
Mid. Atlantic	2.174	1,497	471	124	30	50	98	Birmingham, AL	194	136	43	12	1	2	10
Albany, NY	44	30	12	1 24	-	1	1	Chattanooga, TN Knoxville, TN	72 86	51 62	12	6	-	3	6
Allentown, PA	27	22	3	2		_	2	Lexington, KY	58	35	18	3	1	1	5
Buffalo, NY	85	57	22	4	2	_	5	Memphis, TN	174	95	60	10	6	3	18
Camden, NJ	27	11	7	3	_	6	2	Mobile, AL	66	48	15	2	1	3	2
Elizabeth, NJ	22	15	3	2	1	1		Montgomery, AL	67	46	15	3	2	1	5
Erie, PA	42	32	9	_	_	1	5	Nashville, TN	144	89	34	12	3	6	9
Jersey City, NJ	39	24	11	3	_	1	3								
New York City, NY	1.072	749	221	65	16	19	41	W.S. Central	1,523	974	366	107	33	43	69
Newark, NJ	33	13	12	3	2	3	-	Austin, TX	98	59	25	7	3	4	5
Paterson, NJ	U	U	U	U	U	U	U	Baton Rouge, LA	103	64	26	5	6	2	2
Philadelphia, PA	377	241	102	21	7	6	12	Corpus Christi, TX	45	33	9	2	_	1	1
Pittsburgh, PA	36	24	8	3	_	1	3	Dallas, TX	200	113	58	17	5	7	6
Reading, PA	38	29	7	1	-	1		El Paso, TX Fort Worth, TX	98 118	73 71	19 34	4	1 2	1	5
Rochester, NY	146	112	21	7	_	6	4	Houston, TX	271	153	75	22	8	13	12
Schenectady, NY	26	23	3	-	-	_	1	Little Rock, AR	83	55	19	7	1	13	3
Scranton, PA	33	26	5	2	(melion)	_	4	New Orleans, LA <sup>s</sup>	U	U	U	Ú	Ú	U	Ü
Syracuse, NY	66	46	13	5	200000	2	9	San Antonio, TX	305	204	65	23	5	8	15
Trenton, NJ	19	11	5	1	1	1		Shreveport, LA	58	40	8	7	1	2	4
Utica, NY Yonkers, NY	18 24	12	5 2	1	1	1	2 4	Tulsa, OK	144	109	28	5	1	1	11
E.N. Central	2.112	1,374						Mountain	1,116	732	261	58	33	31	67
Akron, OH	2,112	1,374	521	138	37	42	142	Albuquerque, NM	63	35	20	3	4	1	3
Canton, OH	45	36	11	2	_	2	4 3	Boise, ID	67	52	8	3	_	4	4
Chicago, IL	328	181	99	35	7	6	28	Colorado Springs, CO	78	54	18	4	1	1	4
Cincinnati, OH	U	U	Ü	U	ú	U	U	Denver, CO	95	54	24	8	4	5	1
Cleveland, OH	253	180	55	12	3	3	12	Las Vegas, NV	311	196	84	15	12	4	20
Columbus, OH	205	134	50	14	3	4	16	Ogden, UT	37	26	8	3		_	4
Dayton, OH	149	94	37	9	-	9	7	Phoenix, AZ	177	111	40	11	5	9	12
Detroit, MI	219	120	75	15	6	3	10	Pueblo, CO	25	17	6	2	_	-	3
Evansville, IN	63	51	8	4	-	income	7	Salt Like City, UT	127	87	26	5	3	6	9
Fort Wayne, IN	82	61	14	4	2	1	12	Tucson, AZ	136	100	27	4	4	1	7
Gary, IN	12	6	5	-	1	-	-	Pacific	1,245	852	275	65	30	22	97
Grand Rapids, MI	60	42	15	1	1	1	4	Berkeley, CA	14	10	2	1		1	1
Indianapolis, IN	209	130	46	17	10	6	12	Fresno, CA	U	U	U	U	U	U	U
Lansing, MI	40	28	7	3	1	1		Glendale, CA	U	U	U	U	U	U	
Milwaukee, WI	121	82	28	8	1	2	11	Honolulu, HI	84	60	18	3	1	2	
Peoria, IL	46	35	9	2	-	-	5	Long Beach, CA	67	38	18	5	3	3	
Rockford, IL	57	40	14	2	1	_		Los Angeles, CA	U	U	U	U	U	U	_
South Bend, IN Toledo, OH	59 97	41 65	13 25	2	-	3	5	Pasadena, CA	32	19	7	5	_	1	1
Youngstown, OH	23	20	3	5	1	1	6	Portland, OR Sacramento, CA	150 U	106 U	33	6	1	4	
			-					San Diego, CA	170	113	39	7	8	3	
W.N. Central	706	475	150	53	16	11	50	San Francisco, CA	124	78	35	9	1	1	11
Des Moines, IA	143	106	24	9	3	1	13	San Jose, CA	251	190	41	9	9	1	
Duluth, MN	21	15	2	4	-	_	_	Santa Cruz, CA	33	19	13	1	9	-	1
Kansas City, KS	33	17	13	2	_	1	1	Seattle, WA	145	94	35	9	3	4	
Kansas City, MO Lincoln, NE	107	80	17	8	1	1	3	Spokane, WA	68	49	12	4	1	2	
Minneapolis, MN	53	23	13	,	-	-	5	Tacoma, WA	107	76	22	6	3	-	3
Omaha, NE	88	65	13	6	-	3	6								
St. Louis, MO	119	61	35	12	9	1	3	Total	11,495**	7,588	2,670	702	242	288	699
St. Paul, MN	48	36	6	3	2	1	5								
Wichita, KS	61	41	15	3	1	1	3								

U: Unavailable. —:No reported cases.

\*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

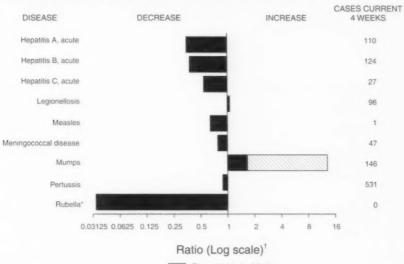
\*Pneumonia and influenza.

Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

Total includes unknown ages.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals December 17, 2006, with historical data



Beyond historical limits

\* No rubella cases were reported for the current 4-week period yielding a ratio for week 50 of zero (0).

† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

#### Notifiable Disease Data Team and 122 Cities Mortality Data Team

Patsy A. Hall

Deborah A. Adams Willie J. Anderson Lenee Blanton

Rosaline Dhara Vernitta Love Pearl C. Sharp

The Morbidity and Mortality Weekly Report (MMWR) Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, send an e-mail message to listserv@listserv.edc.gov. The body content should read SUBscribe mmurtor. Electronic copy also is available from CDC's Internet server at http://www.cdc.gov/mmwr or from CDC's file transfer protocol server at ftp://ftp.cdc.gopublications/mmwr. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington 20402; telephone 202-512-1800.

Data in the weekly MMWR are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of busin Friday; compiled data on a national basis are officially released to the public on the following Friday. Data are compiled in the National Center for Public Informatics, Division of Integrated Surveillance Systems and Services. Address all inquiries about the MMWR Series, including material to be consider publication, to Editor, MMWR Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to www.mmunq@edc.gov.

All material in the MMWR Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciate

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Sei

References to non-CDC sites on the Internet are provided as a service to MMWR readers and do not constitute or imply endorsement of these organizations their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses list MMWR were current as of the date of publication.

&U.S. Government Printing Office: 2007-623-038/40096 Region IV ISSN: 0149-2195

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
RETURN SERVICE REQUESTED

93036 0001
PROQUEST INFORMATION & LEARNING PERIODICALS ACQUISITION
PO BOX 1346
ANN ARBOR, MI 48106-1346

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC
ATLANTA, GA 30333

FIRST-CLASS MAIL
POSTAGE & FEES PAID
PHS/CDC
Permit No. G-284

